SUPPORT SYSTEMS FOR IMPLEMENTING CURRICULUM IN SCHOOL BOARDS

MICHAEL G. FULLAN, Principal Investigator
STEPHEN E. ANDERSON, Research Associate
EARLE E. NEWTON, Research Associate

This research project was funded under contract
by the Ministry of Education, Ontario.

It reflects the views of the authors and not
necessarily those of the Ministry.

The Honourable Sean Conway, Minister
Bernard J. Shapiro, Deputy Minister

Ministry
of
Education

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ABSTRACT

While there is a great deal of research on the implementation of individual innovations, and on the role of the principal and other school-level factors, research on the role of school systems or districts in change has been neglected. The purpose of this study is to examine the models, policies, procedures, and practices used by some school boards to stimulate, support, co-ordinate, and assess the effectiveness of curriculum changes in the classrooms and schools within their jurisdiction.

We selected four school boards for intensive case studies. Boards were selected on the basis that they had a written model or approach for planning and implementing curriculum, and were attempting to put it into practice. Three public and one separate school board were included in the study. They ranged in size from 17 000 to 46 000 students.

The data collection consisted of (1) collection of documents (organizational charts, implementation model, job descriptions, task force and other reports, etc.), (2) interviews with central office and area superintendents, and with curriculum consultants, (3) questionnaires addressed to consultants, and (4) school-level interviews with some principals and teachers. In total, 32 supervisory officers were interviewed, 37 consultants were interviewed, 59 consultants filled out questionnaires, and 16 principals and 32 teachers were interviewed.

The report provides descriptions of the four models, examination of the models as practised, identification of factors facilitating and inhibiting implementation of the models, a more focused examination at the school level of a specific curriculum innovation selected in each board, and an assessment of the effectiveness and outcomes of the models.

The report concludes with an analysis of planned change in perspective by considering the recent literature on the role of school systems in change, by reviewing current trends and practices in Ontario, and by formulating a number of lessons and recommendations for developing more effective models, practices, and procedures for planning and implementing curriculum improvements.

PREFACE

The study of how school systems manage change is not well developed in the research literature. We conducted case studies of four school systems in Ontario to describe the models of planning and implementing curriculum change that had been developed by the respective systems, to examine the models as practised, to assess the impact of the models, and to derive implications for future school-system practices designed to bring about educational improvements.

We especially wish to thank the Directors, Superintendents, Consultants, Principals, and Teachers who participated in the research. We were given complete access to information and received full co-operation at all levels. Everyone in the four systems was most helpful and forthcoming in the interviews, in describing and sharing their experiences and insights into the process of change. The study is much stronger for it, and we thank them for their time and ideas.

Putting the report together was difficult because it required taking four individual case studies and integrating them into a final coherent report. Chris Pimblott and Jo Paul spent hours and hours on the details of producing the final report. For their skill and commitment beyond the call of duty, we are deeply appreciative.

CHAPTER 1 PURPOSE AND METHODS OF THE STUDY

PURPOSES OF THE STUDY

The question of implementation of policy, i.e., whether or not curriculum and other policies actually get put into practice, has received increasingly intensive attention by practitioners and researchers alike over the past 15 years. We can conceive of this period in three broad phases. The first phase - covering most of 1970s - was essentially one of documenting failure (see Fullan and Pomfret 1977 for a review). We learned more about what not to do than anything else. In the second phase - roughly 1978 to the present - identifying and analysing success and effectiveness in schools became the dominant theme (Fullan 1982, 1985; Huberman and Miles 1984). The third phase on which we are just embarking explicitly addresses the problem of the management of change. The second phase was one of "explaining" success, while the current phase is one of doing something about it. Understanding success in one situation is very different from being able to plan and manage change successfully through deliberate means in any number of other settings.

The knowledge developed over these 15 years is quite sophisticated and detailed in a number of respects. We know a lot about what constitutes effective in-service education, about the role of the principal as instructional leader, about conditions at the school level that make for more effective environments for implementation, and about the fate of specific innovations.

Surprisingly we do not know much about how school districts organize themselves, what procedures they develop and use, and how the major participants carry out their tasks and interrelationships. The studies that take into account the role of the district do so from an innovation-focused perspective, that is, they trace the fate of particular innovations (Crandall *et al*. 1983). This innovation-driven perspective does not (nor does it purport to) examine the system *qua* system - how it manages multiple innovations. There is also some general notion in the literature that the Chief Superintendent can be a critical force, but again no conception of how the system in all its parts tries to, and actually does, go about its business.

The purpose of this study, then, is to address this gap in our knowledge. We set out to describe and analyse in some detail the procedures and practices used by some school boards to stimulate, support, co-ordinate, and assess the effectiveness of curriculum implementation in the classrooms and schools within their jurisdiction. In the same way that schools as effective organizations are being examined with great intensity, we believe that school districts must receive careful attention. School districts probably have more leverage in accomplishing wider, deeper change than any other level in the system, including schools (mostly with change confined to single schools) and government departments of education or other regional provincial agencies (too remote from the local situation).

The outline of this report is as follows. In the rest of this introduction we describe our main data sources and methods (essentially four case studies of school districts). Part I of the report contains four chapters (2 through 5), one each for the case studies. In each chapter we first describe the official board implementation model as it is set down in documents; this is followed by a section based on interviews on how the model is actually practised, according to those directly involved. The subsection on practice serves to elaborate in a much clearer and more vivid manner the strengths and weaknesses of the models.

Part II is focused more analytically. The three chapters are comparative across the four cases and focus respectively on factors supporting and inhibiting implementation in the district (chapter 6), innovation at the school level (chapter 7), and the overall effectiveness and impact of the districts' approaches (chapter 8).

Part III (chapter 9) consists of a single chapter on planned change in perspective. It takes the conceptual/practical lessons learned from the cases, the recent research literature on planned change, and some of the practical issues being raised around the province, as other boards and agencies try to develop and use better "implementation plans", and synthesizes these three sources into the main findings of the study. We think that there are some hitherto neglected or misunderstood aspects of the process of change about which this study provides insights. These include the relationship between authority and support, the relationship between decentralized (e.g., school based) and centralized (e.g., district) control, the role of implementation plans, the identification of particular techniques and procedures, and the nature of the evolution of school district capacity to manage change.

Note, that we do not in the traditional manner start with a review of research. It is a tribute to the state of the art of practice in Ontario that we can organize the flow of this report on the assumption that "there is nothing so theoretical as good practice". We can get a much better picture of the phenomenon of planned change by starting with good practice and then relating it to the research literature. Proceeding inductively will enable us to "use" recent research more insightfully.[1]

A theoretical orientation to the study is in order, however, and best can be stated briefly by responding to three questions: "What is change (implementation)?" "How does it occur?" and "What types of factors affect it?" As we have defined it elsewhere (Fullan 1982), the question of what is curriculum implementation is a matter of asking what types of things would have changed in the classroom if a given curriculum were to be implemented. In our view, the following three aspects or dimensions would be affected: (i) the use of new materials; (ii) the use of new skills, behaviours, or practices; and (iii) changes in beliefs and understandings. The use of new materials is the dimension on which people usually focus. The second and third dimensions, however, are much more critical and problematic. Changes in teaching practices and in underlying beliefs have to do respectively with changes in doing and thinking, and it is these types of changes that have the most impact.

---

[1] This is not to say that the leaders represented in the case studies proceeded inductively (although to a certain extent they did). In fact, they are also active consumers of research on planned change. There is, of course, a two-way relationship between theory and practice.

The second question raises the issue of how (By what processes?) do changes occur in doing and thinking. Again we have analysed this elsewhere in reference to many particular examples (Fullan 1985). Simply stated, implementation is a process of altering one's way of doing and thinking about particular tasks and phenomenon. It is above all a learning process; but it is the adults (teachers, administrators, consultants, etc.) who are doing the learning more so than the children. It is for this reason that change must be conceived of as "a process not an event", that it takes place over time, and that the implementation phase (when people are actually learning how to do something) is more important than other phases, like planning or reviewing. Change as a learning process denotes its individual developmental nature.

The third aspect - the types of factors that affect the process - introduces the question of the organizational conditions at all levels that affect the chances that individual development will or will not occur with respect to any given change initiative. We will avoid also elaboration except to say that there are important determining conditions at the school level (e.g., the instructional role of the principal, teacher collegiality), at the district level (the focus of our study, although we should note that this includes how a district tries to improve school-level conditions), and at levels outside the local board (e.g., policies, procedures, and resources at regional and provincial levels).

The case studies show how some school districts deliberately and systematically are attempting to develop policies and procedures which in effect integrate the three aspects of change just discussed.

SAMPLE AND METHODS

The number of case studies one decides to conduct is mostly arbitrary. One is too few. Only very large-scale studies can do many cases. Given our resources, we decided on four. We thought that this would give us a sufficient range of models and issues. We did not seek boards which had particular models. We had four main criteria: (1) we wanted boards which actually had a written approach (a model) for planning and implementing curriculum, and were known to be active in developing curriculum (but not necessarily successful). We did not want to study non-events, i.e., boards that did not have a plan, or had a plan but were not using it; (2) we were interested in the support role of curriculum consultants and therefore selected boards sizeable enough to have consultants. This meant that small boards without consultants were omitted; (3) at the other end of the scale we did not want to include very large boards (e.g., above 60 000 students) as they had complexities of their own; and (4) some geographical spread, but, for reasons of resources, confined to the southern part of the province. Using our own knowledge from previous field work and workshops, and consulting with others who were actively involved in the field, such as Professor Ken Leithwood of OISE and Ministry of Education officials, we selected four boards.

In making the selection we verified from at least two other sources that each board had a curriculum model and was actively using it and attempting to improve its procedures. When contacted, one of the four boards indicated that they were unable to participate as they were at the beginning stages of a major reorganization. This board was replaced with one in the same region. The four boards - three public and one separate - that agreed to participate were given pseudonyms in this report.[2] The boards along with size of student enrolment are:

County East	17 500 students
Region North	46 000 students
West Public	40 000 students
South Separate	21 000 students

Our sample is probably different because it overrepresents boards that are active in having and using curriculum models. It is not generalizable to the North, especially very small boards, nor to very large boards. We do believe that it fairly reflects issues in boards with student enrolments in the 15 000 to 50 000 range, and that many of the factors and findings are applicable to boards with smaller and larger enrolments.

---

[2] Beyond the use of a pseudonym we have made no major attempt to disguise the boards. People familiar with the system would likely be able to identify the boards. We did take a number of precautions to ensure that individual anonymity was preserved and that the liaison person in each board read and commented on the draft case study before we made it final.

A uniform multimethod design for data collection was employed for each case. Our data collection consisted of four main parts labelled here as documents, central-office interviews, questionnaires, and school-level interviews. With respect to documents, we obtained from each board a large number of descriptive and evaluative information pertaining to organizational structure, role descriptions, description of the curriculum model, administrative and task force reports, and the like.

The interview schedule was developed and pretested with a small (N=6) sample of people outside the systems represented in the cases. We interviewed all Supervisory Officers in the boards at central and area offices, excluding the Superintendent of Business and some specialized assistant superintendents. We also interviewed from one-third to one-half of the curriculum consultants randomly selected across subject areas or levels of specialization, except in County East where the staff was small enough in number to include all consultants. The interview schedule focused on specific topics or areas with probes but allowed respondents to speak in an open-ended manner. Most interviews took one and a half hours. Of the three members of the research team, at least two were involved in interviewing in each board. The interview schedule covered the following topics: the role and responsibilities of the person interviewed; perceptions and descriptions of the approach used (i.e., model as practised) in the system to develop, implement, and review curriculum; the role of external agencies; perceptions of the roles and interrelationships of key personnel (superintendents, consultants, principals, teachers); factors facilitating and hindering implementation; indicators of effectiveness and impact; lessons learned about implementation; and the future of the approach to implementation.

A more structured and detailed questionnaire for consultants was also developed, pretested, revised, and administered to all consultants in each board, excluding those in special services (special education, psychological services, technicians). The intent was to gather further information on the background and activities of consultants in order to extend and crosscheck some of the interview data.

The final component of the case study involved the school level. Recall that we deliberately avoided a specific innovation focus in the case study as a whole, because we wanted to find out how boards approached innovations, not just how one particular innovation fared. Nonetheless, we decided that it would be a valuable addition to the design of the study if we were to take a recent innovation as an example, and to do interviews at the school level to find out what principals and teachers thought about their implementation experiences. We confined the selection to elementary levels. The innovations selected in consultation with our superintendent-liaison contact were Environmental Studies (County East), Family Life/Sex Education (Region North), Environmental Studies (West Public), and Language Immersion (South Separate). We identified four schools in each board from one of its areas using variation in size as the main criterion. We then interviewed the principals and two teachers from each school involved in teaching at the appropriate grade level. Thus, the school-level sample across the four cases consisted of 16 principals and 32 teachers. The interview schedule was adapted from the central office schedule deleting some questions and adding questions that focus on the specific innovation and on in-school activities. The sample in total is summarized below.

	Interview Superint.	Interview Consultants	Questionnaire Consultants Sample	Questionnaire Consultants Returned	Interview School Pr.	Interview School Tr.
County East	6	9	10	10	4	8
Region North	11	7	18	17	4	8
West Public	9	12	34	15	4	8
South Separate	6	9	25	17	4	8
Total	32	37	87	59	16	32

Interviews were recorded by hand during interviews, with key issues being recorded as close to verbatim as possible. Conventional content analyses were used to analyse interview and document data. A standard outline for structuring the writeup of each case study was devised. Responsibility for writing a given case was assumed by one member of the team. The initial draft was submitted to the other two members of the team to check the accuracy, consistency, organization, and readability of the report. All members of the team had complete sets of typed interviews. Following peer review and revision, a draft of each case was submitted to the chief contact person in each board as a further check on the accuracy of factual information, and to provide the chance for reaction to the analysis. The four case studies were approved and range in length from 60 to 100 pages. The four case studies formed the basis of the final report.

Beyond the case studies throughout the project, we sought (although not systematically) additional information in the form of implementation plans from other boards in the province, or studies done in the province on implementation planning, as well as recent research literature on planned change and on the role of school districts. These data along with lessons from the four case studies are used in the final chapter of the report to develop implications about planned change in perspective.

In the next section of the report - Part I - we present chapters on each of the four cases, describing the official model and comparing it to the model as practised.

PART I

THE CASE STUDIES:
THE OFFICIAL MODELS
AND THE MODELS AS PRACTISED

CHAPTER 2 EAST COUNTY: OFFICIAL MODEL AND MODEL AS PRACTISED

East County Board of Education was formed in 1969 from 12 smaller boards as part of the reorganization to larger units of administration in the Province. The county is 40 miles (64 km) in width and 90 miles (144 km) in length and consists of two main cities and large sections of rural areas. In September 1985, the system had approximately 17 500 students in 42 elementary and 8 secondary schools. The Board employs some 1000 teachers. The County is governed by an elected Board (19 in number) of School Trustees. The annual budget of the county was $67 million in 1984.

The administrative structure is depicted in figure 2.1. Each of the eight secondary schools and its feeder schools forms an Associate School Group (ASG). Superintendents of Instruction supervise two ASGs each.

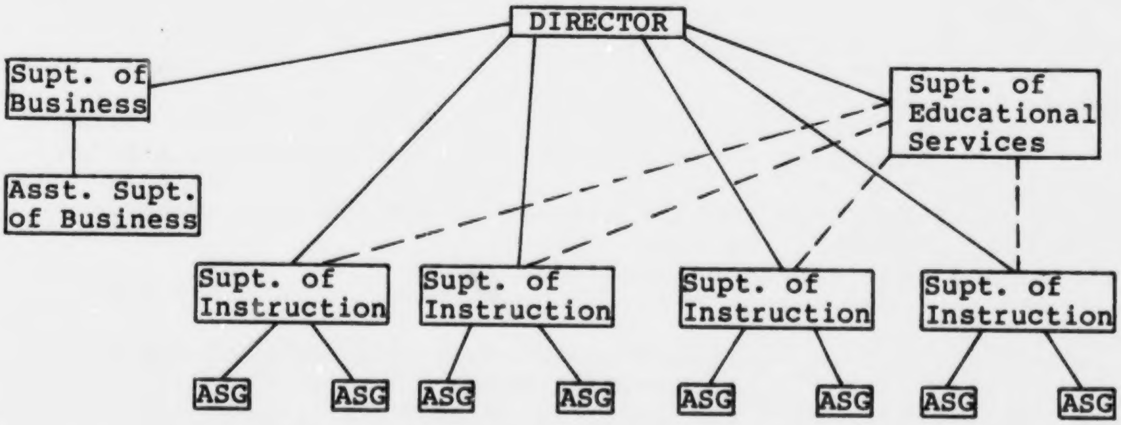

DIRECTOR
Supt. of Business
Asst. Supt. of Business
Supt. of Educational Services
Supt. of Instruction
Supt. of Instruction
Supt. of Instruction
Supt. of Instruction
ASG
ASG
ASG
ASG
ASG
ASG
ASG
ASG

Figure 2.1 Administrative Structure of East County

All major curriculum decisions are made in an Administrative Council of which all superintendents are members.

In addition, there is a system of support staff (figure 2.2).

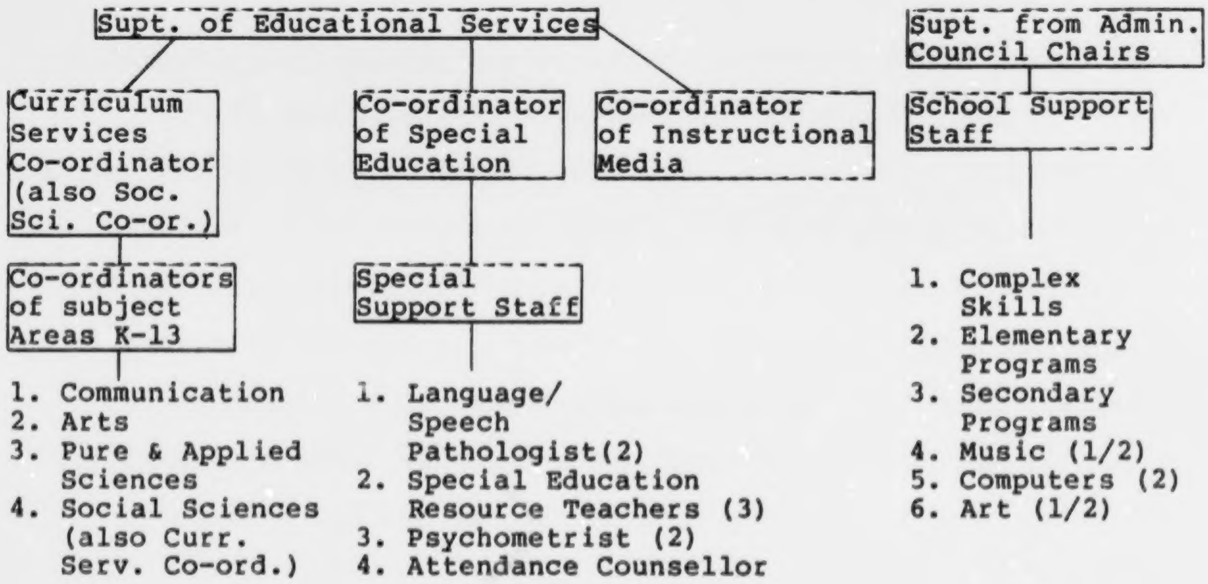

Supt. of Educational Services
Curriculum Services Co-ordinator (also Soc. Sci. Co-or.)
Co-ordinator of Special Education
Co-ordinator of Instructional Media
Co-ordinators of subject Areas K-13
Special Support Staff
1. Communication
2. Arts
3. Pure & Applied Sciences
4. Social Sciences (also Curr. Serv. Co-ord.)
1. Language/ Speech Pathologist(2)
2. Special Education Resource Teachers (3)
3. Psychometrist (2)
4. Attendance Counsellor
Supt. from Admin. Council Chairs
School Support Staff
1. Complex Skills
2. Elementary Programs
3. Secondary Programs
4. Music (1/2)
5. Computers (2)
6. Art (1/2)

Figure 2.2 East County Resource Staff

The main initiative and co-ordination for curriculum planning is the responsibility of a system of curriculum co-ordinators operating under the general direction of the Superintendent of Education Services.

It is by examining in more detail the official model and the model as practised that the administrative and support structure of the county best can be understood.

I OFFICIAL MODEL

East County was one of the early starters in the province in working actively on problems of curriculum. Jones' dissertation (1985) documents in great detail the trials, tribulations, and evolution of the East County approach as it occurred over the 1969-1982 period. Jones characterizes it as follows:

> The planned change process in [East County] could be defined as *persistent, reflective problem solving* in which the system learned from its trials and developed more sophisticated procedures within this process. (Jones 1985, p.347, emphasis in original)

Over time the system moved from a vague concern about quality, to providing some support assistance, to working on problems of lack of administrative leadership at both the superintendent and principal levels, to the development of procedures, programs, and leadership in the management of innovation. Over the 1969-1985 period, the system has been fortunate in having three successive Directors of Education who have been program-oriented. Each Director furthered the development of a systems approach to curriculum development and implementation. A theme to which we will be returning, is the concept of longitudinal, cumulative development of a school systems approach to curriculum change. East County's approach began in earnest in 1974-75 with the appointment of subject co-ordinators to assist implementation. It has taken 10 years of persistence for it to develop to a stage of reasonable coherence.

The official approach to curriculum improvement in East County can be described best in three parts: A. description of the formal model; B. a description of the role expectations at each level; and C. a reference to the main documents and procedures used in implementing the model.

A. The Formal Model: A Handbook for Curriculum Management

The Handbook for Curriculum Management (East County, 1983) describes the official approach and procedures for curriculum improvement in the system. There are two basic foundations to the approach. The first is the notion of Learning Outcomes Programs (LOP). This starting point emphasizes that the basis for any curriculum initiative is its relationship to clearly stated goals and expectations for student learning. The second basic conceptual pillar is the idea that the Learning Outcomes will be best achieved by a management framework organized as "Management by Results" (MBR). The *Handbook* summarizes:

> Very simply, MBR emphasizes the collaborative establishment by personnel at all levels of clear, measurable performance expectations followed by regular review and evaluation. (p.1)
>
> and
>
> The curriculum management processes...are the result of the recognition from both experience and research literature that curriculum implementation does not happen without careful planning. (p.3)

The substance of the model consists of a five-stage Program Implementation Sequence. The sequence includes procedures to develop, implement, and evaluate programs. The five stages, all co-ordinated and based on collaboration within and across levels are:

1. The School Program Stage
2. Field-Development Stage
3. Field-Test Stage
4. County Program Stage
5. East County Review Stage

1. The School Program Stage

The process is usually initiated when the Ministry of Education issues a new curriculum guideline. Unlike many boards, which simply introduce the guideline to the system, the starting point for East County is an analysis of the new Ministry document. The Curriculum Services Department begins by making an analysis of the document in terms of what it says, what is new in it compared to previous guidelines or existing curriculum in the system, and so on. The major objective "is to produce a synopsis of the document and its learning outcomes" (p.6). The method used is for the relevant Curriculum Services Co-ordinator to select, train, and manage a teacher committee in conducting the analysis. The analysis is validated by subject teachers and made available for school use. Schools at this stage are expected to review the curriculum in question and make it consistent as far as is possible with the Ministry guidelines, although there is no developed county-wide program at this point. The effects at this stage according to the manual are that some teachers become early adopters, some parts of the program begin to be developed and can be used in the Field-Development Stage, and the system identifies directions that are consistent with its own goals and with Ministry of Education requirements.

2. Field-Development Stage

Curriculum Services co-ordinates a process designed to reach agreement on Unit/Lesson Outcomes. A specific and integrated statement of learning outcomes is developed by a Subject Council or Writing Committee. Members are selected from volunteers according to criteria of knowledge, interest, dispersion across schools, grade levels, etc. The result is agreement on Unit/Lesson Outcomes, a partial development of materials, and a group of teachers with curriculum expertise (Subject Council members and other validators) who can be used for future in-service training, and who can continue to provide materials for the next stage.

3. Field-Test Stage

This stage involves the development of curriculum materials to support the program, the refinement of the program through trial use in selected classrooms, and the eventual production of a complete program for general use. Schools participate by identifying teacher participants and by using the materials. These teacher field testers opt in only after being introduced to the program in an initial in-service session. During the field test period they meet regularly with the co-ordinator/school support staff for ongoing in-service training, sharing, and problem solving. The field testers also submit detailed evaluations. Other teachers are invited to participate as monitors; as such they have access to all materials developed and are required in turn to submit detailed assessments. The results as stated in the manual are the availability of a useful program, a significant number of implementers, and an improvement in the curriculum-development skills of participants.

4. County Program Stage

The product of stage three is a "County Program which becomes the official core program that all teachers are expected to adopt and begin to implement". The program is declared a County Program by the Administrative Council (all superintendents) on the advice of Curriculum Services which also presents an associated implementation plan. Principals are advised by superintendents and are expected to incorporate the new program in their "goal packages" which are worked out with their Area Superintendent and reviewed every three months. In the goal packages and related activities, principals are expected to be responsible for the supervision and evaluation of the program in the school by communicating clear expectations to each teacher, and through the use of a needs-assessment procedure to determine both the degree of implementation of each teacher's program and the assistance needed to implement the program more fully. Goal packages, formulated by principals for each priority selected, contain the following components: goals, specific objectives, indicators of success, actions to be taken, and (eventually) results. Curriculum Services develops and provides in-service materials and consultative services to meet the needs identified by schools, and it designs program-evaluation procedures to determine implementation growth and current needs.

5. East County Review Stage

East's Review Stage "becomes active when program-evaluation processes become the main methods by which the school and the system make adjustments and improvements in the County program" (p.10). There is no automatic timeline for reviews. At the county level, Curriculum Services determines the frequency of reviews depending on the degree of concern, need for information, and requests. Schools also conduct reviews to identify their own needs. Programs are refined by a reconstructed Subject Council using the variety of evaluation data gathered during the review.

B. Role Expectations

Curriculum-related role expectations for teachers, principals, area superintendents, the Superintendent of Education Services and Curriculum Services Support Staff, and the Director are clearly stated.

At the early stages of the Program Implementation Sequence teachers are expected to volunteer for subject councils, field development, or field-test activities. Since East County is a medium-sized system the majority of teachers are at one time or another involved in these early stages. Furthermore, such involvement results in a pool of future leaders in the system (heads, principals, consultants, etc.), and in fact is the only way to get ahead in the system (see chapter 6). At the County and Review stages teachers are expected to implement fully the county-wide programs and to participate freely in providing program-evaluation data. In turn, teachers have the right to expect clear guidance and assistance, especially from the principal.

The principal is responsible for implementation of agreed-upon curriculum within his or her school. Again at the earlier stages in the sequence, the principal is expected to facilitate, encourage, and otherwise make possible the participation of volunteer teachers in field development and testing. At the county stage, however, the role requirement of the principal is clear and forceful. He or she is to be the program leader and manager in developing with teachers a school-level implementation plan based on the needs, degree of classroom implementation, and necessary assistance for teachers. As stated in the Handbook (1983, p.14) the principal's responsibilities are:

1. Manages the implementation of programs in the school.
2. Provides for the curriculum needs of teachers to deliver quality programs.
3. Evaluates the quality of programs received by students.

The principal manages these responsibilities through the development of yearly implementation plans (i.e., goal packages), by assessing implementation levels of teachers, by promoting the involvement of teachers at all stages of the implementation sequence, by helping teachers receive assistance, in-service materials, consultative services and the like, and by conducting informal and formal evaluations on student performance, quality of programs delivered, and growth in the effectiveness of school programs.

The Area Superintendent is "responsible for co-ordinating curriculum initiatives as a member of the Administrative Council and for supervising the implementation of programs in his [or her]

ASG" (Handbook 1983, p.13). Note the direct role of the Area Superintendents in curriculum implementation in two main respects. First, at the Administrative Council level, the superintendent participates fully in deciding on curriculum priorities, implementation plans, timing, evaluation, etc. Thus, as a member of the Administrative Council, the superintendent "negotiates curriculum initiatives to make them manageable and consistent within all ASGs". Second, once a priority has been approved, the superintendent as a supervisory official of the ASG "negotiates curriculum initiatives with each principal and other appropriate staff on how and when specific actions will take place" and "supervises the implementation of curriculum initiatives in the ASG" (p.13).

The Superintendent of Education Services and his staff are "responsible for planning curriculum initiatives on behalf of the system and for providing support services to carry out those initiatives" (p.11). In particular, the Superintendent of Education Services is responsible for preparing materials and describing the specifics of each initiative, including special education, brought before the Administrative Council. In this role the Superintendent of Education Services oversees the roles of co-ordinators whose job it is to manage all the activities in the five-stage Program Implementation Sequence described above. The Superintendent is also responsible for selecting and training members of the curriculum services staff (i.e., consultants) and for the overall system of responding to requests for implementation assistance from superintendents, principals, and teachers.

There are two types of curriculum consultants - co-ordinators and school support staff (see figure 2.2). There is a co-ordinator of curriculum services, who plays a central role in developing basic procedures and, in general, in co-ordinating the curriculum co-ordinators (Special Education is a separate stream, although it is integrated with all curricula). The co-ordinators themselves (five in all including special education) have major management responsibilities in stages 1-3 and 5; that is, in their curriculum area, it is their responsibility to set up, plan, and co-ordinate the school field development and testing stages, and to eventually conduct major reviews. At the fourth stage - county-wide implementation - co-ordinators formulate and present to the administrative council the basic implementation plan, but it is the area superintendents' and principals' responsibility to plan for, and carry out, implementation at the area and school level. Co-ordinators present initial awareness sessions and provide some assistance when requested, but it is clearly an indirect and small role in actual implementation.

The other set of resource personnel is that of the six school support staff (figure 2.2). They are expected to provide more direct implementation assistance to schools on request, and to influence implementation planning insofar as they make suggestions to superintendents and principals. The school support staff usually participate actively in the writing teams (stages 2 and 3).

They subsequently provide implementation assistance by working intensively in some schools at the initial stages of implementation, attempting to help schools organize their own planning and follow-through. The time available to work with schools is very limited, so that support staff work with a small number at a time.

Finally, the Director (the current Director is the former Superintendent of Curriculum Services in the system) is expected to play an active curriculum leadership role in the system. Officially the Director:

1. Co-ordinates (as chairman) the Administrative Council negotiations on initiatives, policies, timelines.
2. Evaluates the plans and actions of Superintendents in implementing curriculum.
3. Allocates resources appropriate to curriculum directions and needs.
4. Communicates curriculum directions to the total system and the public (p.16).

C. Documents and Procedures Designed to Assist Curriculum Improvement

There are several key documents/procedures that have been developed to assist in the process of planned change. The main one is the Handbook for Curriculum Management (1983) just described. Program List and Program Sequence documents are distributed annually; in these the stages of development (according to the five stages) are listed for all subjects and grade levels in the system. Four additional technical documents, or strategies, have been developed to assist curriculum processes: the Program Scale, The Program Management Scale, The Leithwood Strategy, and The Program Evaluation Process.

The Program Scale (Jones 1980) provides a framework for determining the quality of implementation of school programs according to levels of accomplishment. The scale is based on integrating two dimensions. The vertical dimension is based on levels of use (LOU) and consists of six stages: (lowest) awareness, discrepant, developmental, functional, refined, integrated (highest). The horizontal dimension consists of eight components: program emphasis, skills, evaluation, materials, strategies, outcomes, philosophy, and values. The resultant 48-cell matrix can be applied to any curriculum subject and provides a framework for developing indicators of program performance at each level for each component. Once developed, the scale and its indicators can be applied (usually through an interview technique) to assess the state of implementation of individual teacher programs and aggregated to assess school, ASG, and county-wide programs. The system stresses that "the scale is not a formula for constructing a program nor is it a teacher evaluation instrument" (Jones 1980, p.1). Its intent is to obtain an accurate picture of "the program as delivered" for the purposes of reporting progress, and more typically for identifying strategies and support for improving program implementation.

The associated Program Management Scale is a simple framework for determining a course of action to improve a program once its level has been established on the Program Scale. The level on the scale is used as a point of departure for developing a plan to address the identified teacher needs through deciding on principal's actions, assistance required, and timelines for accomplishment.

The Leithwood Strategy (named after the work of Professor Kenneth Leithwood of OISE, who has been assisting the County in the development of its basic procedures) is a generic procedure for establishing goals, identifying obstacles, and planning actions to overcome the obstacles and achieve the goals incrementally. It is similar and complementary to the Program Management Scale in that it is an implementation strategy that can be used by principals, for example, for analysing and addressing curriculum needs.

The Program Evaluation Process (East County 1984), known locally as the Bubbles, is a generic organizer for evaluation based on five bubbles or steps: (1) what is the question; (2) determine the best way to get information; (3) task analysis (timelines, roles, tasks, etc.); (4) collect information; and (5) answer questions/make decisions. For example, the document illustrates the latter in the following way: "if we find that most schools have not implemented an Environmental Studies program consistent with the County program, we will initiate more extensive implementation plans including in-service for teachers and principals" (East County 1984, p.6).

It should be noted that all of the above aids are used at the individual or school level (as when a principal or group of staff members wish to conduct a small-scale review or formulate a plan) as well as at the system level (as when the system is conducting a county-wide review of a program). There are several examples of major reviews using these procedures including, for example, reports on the implementation of the province's Special Education

Act (The Education Amendment Act - Implementation Plan, East County 1985) and an assessment of Environmental Studies (see chapter 7).

We should also like to mention a final, more recent document on criteria for promotion, because it is so indicative of the direction of the system (and indeed a trend in all of our case studies). The county had the occasion to develop a policy on Hiring of Department Heads (East County 1985). The interview Team consists of the Principal and Vice-Principal from the hiring school and another Principal and Vice-Principal from the system. Questions have been developed to assess the candidate's abilities in five categories:

1. Curriculum management (development, implementation, and evaluation)
2. Subject expertise
3. Leadership skills
4. Communication skills
5. Organizational skills

Each category is rated on a scale from 0 to 5. Curriculum management is weighted the highest with a value of 3 X the scale score, subject and leadership receive a value of 2, and communication and organization a value of 1 times the scale score. Thus, the maximum score a candidate could obtain is 45 (3X5 + 2X5 + 2X5 + 1X5 + 1X5) with curriculum management determining one-third of the total maximum score. This represents another example of the priority and procedural explicitness attached in the County to curriculum management.

In the next section we investigate in more detail the model as practised.

II THE MODEL AS PRACTISED

The previous section described the official version of the County's approach to curriculum development, implementation, and review. In this section the actual approach to curriculum is examined, based mainly on interviews with senior administrators and Board consultants, supplemented by the consultant survey (see chapter 1).

Recall that we interviewed all superintendents (N=6) excluding business officials, and 9 of the 10 central consultants. In organizing this section, we first present the views of superintendents, followed by those of the consultants.

Superintendents

Remarkably, in each of the 15 interviews, we obtained a description of activities and underlying principles that was complete, consistent across interviews, and consistent with the official management model.[3] Virtually everyone defined implementation as the process of putting agreed-upon curriculum priorities into practice, or the process of delivery of new programs in the school and the classroom. Typical of the interviews one superintendent said:

---

[3] In quoting from interviews we use the designations (S) for Superintendent, (C) for curriculum co-ordinator.

> "We take new documents from the Ministry, we analyze, and give schools a quick synopsis. We gather some of our strong people and they develop a document and field test it, and then it becomes county-wide. When a curriculum development comes to a point that it should be county-wide, a co-ordinator works out an implementation plan and submits it to Administrative Council where it is eventually agreed and there is a commitment to it.
>
> "The implementation plan identifies actions for people to take - superintendents, principals incorporating it into their goal packages, implementation assistance from co-ordinators and the support team.
>
> "The main features of the plan are:
>
> "First, we help the schools by giving a synopsis - a précis - of what the document contains in terms of the desired state as compared to our current state.
>
> "Instead of 100 pages from the Ministry, they get a short précis. Second, we use people in the field to do curriculum development. We pick three or four good teachers, use people in the classrooms who have credibility.
>
> "Third, the area superintendents are committed to implementation through discussion at Administrative Council and actions they agree to.
>
> "Fourth, the principals' goals packages call for explicit agreement on new curriculum priorities.
>
> "Fifth, we stress the use of PD days. We establish at least two Professional Development days in addition to the normal instructional days. Principals submit plans as to how they intend to implement a county-wide document. At the elementary level we have made great gains with the principals' use of instructional days and other days as part of an overall plan - that is it's a process not an event." (S)

Area Superintendents saw their role as critical:

> "One of my major roles is in corporate decision making in the Administrative Council. In development, our role is largely supportive of central curriculum people, not only being aware but encouraging principals and teachers to become involved in development and field testing." (S)

At the implementation stage the same superintendent stressed the superintendent-principal interaction concerning the goal package:

> "Principals' goal package - a plan for how to implement environmental studies, for example. We supervise what they set out in goal packages - the latter is negotiated. Implementation may look different in one school than another. Principal ownership is shown in dialogue with the Superintendent. The goal package is reviewed four times a year - September, December, February, May or June. In between, we are checking and addressing concerns. We have reached a point that the goal packages are really operational. They are authentic, meaningful exercises and they act as supervising, monitoring, and assisting." (S)

The division of responsibilities between curriculum services and operations (area superintendents and principals) was described clearly by another superintendent:

> "The role of curriculum services is development; my role is implementation. First, the delivery of a program in the school. Second, providing training and support for people to do it. The ASG cabinet (principals in the ASG and the area superintendent) meets once a month. In each meeting, there is a curriculum section. There might be information to share about review. One of the co-ordinators might be invited to speak about new initiatives. The monthly meetings are followed up with visits to the schools with principals, as part of their evaluation each year. I examine what they are doing about program evaluation. My evaluation of them centres on things that we have agreed upon when they developed the goal packages. The support part of my role includes first, provision of in-service, and second, management of curriculum development funds for my areas in order to get maximum benefit." (S)

We will have more to say about curriculum consultants in a moment, but superintendents were clear about the limited role consultants do and should play during implementation. Question: "What role do co-ordinators play during the implementation phase?" Superintendent, replying without hesitation:

> "None, until it comes to review. It is not their job to go out in schools to see that programs are delivered. That's the job of the principal and superintendent. They can be called upon to assist with in-service." (S)

Another superintendent:

> "Once a program has been developed, we expect, at the school level, that the principal and department head would have looked at the program and would have judged it according to the criteria on the Program Scale. These criteria are the guts of the County East rational approach to curriculum development and implementation. The Program Scale enables a principal or a superintendent to make intelligent observations about any program. It allows the principal to be a fairly effective curriculum leader. Once a principal knows that a teacher is missing something, he and the teacher draw up an implementation plan with specific outcomes and times and dates in which the teacher is going to work on them. This is where the support people come in. Note that needs have been identified here, because, unless the principal and department heads are convinced that there is a need, they aren't likely to involve outside people.
>
> "Basically the way it works is that you look at a program scale, you see the ideal, you note the discrepancy, and you seek resources to overcome the discrepancy. We call it a Leithwood-type strategy to identify and meet needs. If the principal or department head doesn't do that, nothing happens. For a supervisory officer who finds a principal identifying needs and making requests based on terms of those needs, that's a good indication that it's working effectively." (S)

This superintendent goes on to reflect on his overall role:

> "My role is to encourage the attitude among principals that curriculum really matters. There is a constant re-edification of expectations in that area. The reality is a principal can be totally overwhelmed with management concerns. Then you have to negotiate a goal package with him. And you specifically focus on curriculum-implementation goals. I make sure I understand a curriculum conceptually. I go to Curriculum Services to make sure I know how it fits into the framework. It's

> important for a superintendent to be fully cognizant of the ideal. When people don't know what the ideal is, it results in fragmentation and frustrated teachers, if they start getting inconsistent messages from supervisory personnel about what they are supposed to be accomplishing." (S)

It should also be noted that support for staff development during implementation is not available just from Curriculum Services. The design of the model in effect cumulatively develops a cadre of skilled and committed teachers who have worked on the field-development and field-testing stages and who are often used within the school for in-service help.

The only discrepancy, in a sense, that we found in the model as practised was the reference that secondary schools, for a variety of reasons, were at earlier stages than were elementary schools in using the procedures. Most superintendents agreed that while the system has gone through complete five-stage cycles at the elementary level, the county is at the early stages with respect to secondary schools. According to two superintendents:

> "Most of the secondary schools are at the school stage (stage one in the model). The county hasn't put together programs at the secondary level. In the secondary schools there are literally hundreds of courses. Each is supposed to have a rationale and the proper format. Every program has to be evaluated on the Program Scale on the part of the principal. There have to be some plans, realistic ones to improve the programs. But the reality is that they only work on two or three programs at a time." (S)

> "Leadership, in secondary schools, is not organized. You get scattered leadership - not from department heads. Department heads are unlikely to say, 'O.K., help me.' OSIS (the new secondary school policy and curriculum document from the Ministry of Education) has brought leadership to the surface. Secondary schools need the Ministry gun at their head to get started." (S)

And another:

> "OSIS is helping us make some gains in the secondary school, but it's not seen as a need. Once you open it up, though, some people recognize the need." (S)

Other responses indicate that the selection and training of secondary school principals and department heads, coupled with the external requirements of OSIS, have already begun to open up new initiatives with secondary schools.

> "One new thing we did was to offer help to secondary schools. We wanted three people from each school. A principal or vice-principal plus two heads. There are 8 schools for a total of 24. We spent a half a day in December focusing on thinking skills. They developed and formulated plans. We got them together for one hour later to go over the plans, and then in February we had a full day, which would not be an event but part of this ongoing set of activities. We wanted to make it less likely that one of the schools would not do something. In this plan we were trying to get at a higher learning outcome, namely, thinking skills. The intent was for every department to do at least something, so it is not just one PD day. I took this plan to Administrative Council to get the support of the area superintendents." (S)

To return to the East County model as a whole, the Director of Education elaborated on the approach and its assumptions:

> "I define curriculum implementation as a development process and linked to evaluation. Development is seen as part of implementation, achieving goals, consensus, direction. Examination of the current state and what we can do - moving to successive proximation, recognizing that evaluation is essential. You have to be clear in the mandate. Getting the front end clean is a tremendous advantage.
>
> "The procedures we use are common and known to the system. Everyone expects it to happen and asks 'why not' if it doesn't. The data-gathering process at the beginning is intended to identify needs collectively. It is designed to bring it from the grass roots and then support it

> administratively, not force it on people. We say to administrators: 'We need your support and this is what it would look like.'
>
> "At the development stage, curriculum co-ordinators submit a proposal to the Administrative Council. We negotiate information and writing teams right back to the school. The critical thing is the Area Superintendent knows who is involved, and why, and with what expectations. For example, with release time. We are getting Area Superintendents and principals to value the activity. You try to establish an atmosphere that collecting information is not an evaluation of them but an assessment for improvement. On the other hand, if we find incompetence, we act on it in a separate process.
>
> "Once the curriculum gets declared as a county-wide document, formal implementation begins. You look at the total numbers and what proportion had already been involved, i.e., you look at your target group. A plan would be devised by the co-ordinator who consults with principals and some teachers. It is presented to Administrative Council, identifying resources, materials, professional development, organizational implications, and timing. Implementation goes right down to the school level for analysis. Schools prioritize through the principal's goal package. Area Superintendents look for common priorities across schools in the ASG."

While there is system-wide agreement on sets of priorities, the negotiation process between superintendents and principals/staff, with respect to implementation planning, means that at any given time different areas and schools can choose to focus on different priorities according to their most pressing needs. Thus, schools are not necessarily working on the same priorities at the same time.

We will pursue some of these issues, as well as focus more on the role of curriculum consultants, in reporting the findings from the interviews with the latter group.

Curriculum Co-ordinators and Support Staff

The nine curriculum support staff members said essentially the same things as superintendents said about the model as practised. For example:

> "Development of a program that results in effective use in classes - that's my definition of implementation." (C)
>
> "In this board, curriculum implementation is planned change with evidence that there is real change at the student delivery level. We do try to make sure that we don't just give the appearance of change. There is a sincere effort to actually move towards the ideal, taking the ministry directives as the ideal. There is a definite process of planned change that we stick to. There is a well-developed process for checking in with the administrators in everything we do." (C)

A school support staff member described the entire process in detail, highlighting some aspects:

> "Our approach to potential Subject Council members is to say, 'Here's a tentative proposed program, an in-service, plus dinner. At that time we will take you through the package. We will plan another session based on your needs.' It's a built-in support system, not just an in-service, and it seems to work very well. We use the field tests not only to get information for the total program, but also to develop the skills of teachers. We try to build a network of skilled teachers and to avoid a backlash when the program finally gets out. The field test is opened up. It's not just given to a select group of teachers. We offer a workshop, they have a choice of whether to buy into the in-service or wait until it becomes a county program. If they continue they are expected to provide the input we need." (C)

This consultant continues:

> "Once the OK is given by Administrative Council, we step in again and support and assist superintendents and principals. A plan is developed. This ties us in more with principals about how to implement the program with school staffs. They develop a school plan. Typically, when I am invited to a school, it would mean

> spending a concentrated specified time with teachers in classrooms helping get a program initiated. There would be an in-service before you go in. I like to work with key teachers in a school. I prefer to take someone with credibility who can take over after I leave, as far as helping other teachers. I insist that the principal be involved. That involves sitting with the principal in advance and developing a plan, like a goal package, and you specify his degree of commitment and involvement. I can say to him 'without that commitment, I don't come.' Because of the time constraints I work on, I'm getting very picky about which principals I will tie into." (C)

Another support staff member emphasized the need for consultants to screen requests and to establish criteria and expectations:

> "I now say to principals, 'so you want this presentation - for what purposes? Where did the need come from? Can my package meet the needs? Where is it going to go? Are you going to be at the meeting since your presence gives teachers support?'" (C)

The four co-ordinators all described the five-stage procedure in detail. We asked especially about Stage 4 - county-wide implementation.

> "During the first year of implementation in phase 1 there is in-service which amounts to awareness sessions. In phase 2, there is an analysis at the school level about their priorities, and where they are going to start, plus incremental notions over a 2-to-3-year period. Principals should be taking these actions, plus area superintendents." (C)

Most of the curriculum staff spoke of the elementary-secondary difference:

> "Now much of the activity is at the secondary level regarding OSIS. The elementary are four or five years ahead of secondary schools as far as being aware of needed changes, county-wide co-ordination, and the recognition of the need to depend on

> others. There is a distinct change in secondary schools in the last six months in recognizing that they can't do it all as individuals. I am seeing people working together who formerly wouldn't have done so." (C)

The same co-ordinator spoke of the critical features of the model as practised.

> "The Administrative Council - bringing them along is crucial. The follow-through - administrative follow-through. Planning is well done, but follow-through is not as well done, especially in one area. But there's been a change in the past two years in area superintendent and principal support for in-service. People are getting more used to using the program scale - more confidence. People phone us more; reason - the quality of the program. Monitoring and supervision of Administrative Council and support all add up to greater quality." (C)

Superintendents also reinforced the planning orientation of consultants:

> "Support staff have the right to say 'I am not sure it is right for me to come into the school since it is not clear how you are going to follow up.' With this kind of input, they are putting pressure on the individual school to pay attention to the follow-up and not just have a workshop input. We have only six of these people, and they can't cover all the schools. I tried to legitimize their right to ask these questions and to encourage the principals to think about using them differently, and the support staff do have the right to say no when they don't think the conditions are right." (S)

The consultants' questionnaire confirmed and extended the above findings. We asked consultants to report on a specific curriculum project on which they were working. In addition to providing implementation assistance to teachers, all but one consultant responded that they provide "a fair amount" or "a lot" of curriculum-implementation assistance to principals. This represents well over 80 per cent; by comparison, the highest percentage of consultants reporting a similar level of work with principals in the other three cases was 46 per cent.

Consultants also indicated that they were heavily involved in implementation monitoring. A higher percentage (57-83 per cent) than in the other cases noted that they were "moderately" or "highly involved" in "designing and monitoring instruments", "collecting implementation data", "analyzing implementation data". Consultants also confirm that a variety of data on implementation is available, and that a variety of data-gathering methods is used (i.e., surveys, consultations, user meetings, observations, tests).

We asked about the existence of specific implementation plans in reference to the project on which they were working then. All consultants indicated that there were written plans at the central level; nearly all (80 per cent) said there were written implementation plans at the school level for the curriculum in question. In response to the question of whether or not the process used in implementing this was in accordance with the system's model, five of the six who replied said "completely" or "for the most part".

A final theme we pursued concerning consultants was to ask superintendents and consultants what they considered to be the characteristics of effective consultants. Table 2.1 lists the characteristics that were identified explicitly by at least three of the six superintendents, and were implied by others:

Table 2.1 Characteristics of Effective Curriculum Consultants

- Well-developed educational philosophy and ability to conceptualize and develop curriculum frameworks (basic understanding of curriculum as a whole)
- Understanding of, and commitment to, East County's approach and procedures, and management ability to use them
- Political and human-relations skills in managing and relating to all levels, including trustees
- Proven ability and credibility in their current role and future potential, including willingness to take initiative
- Subject-matter expertise in several areas
- Tolerance for frustration and for being overworked

The consultants, in describing their roles, reflected identical emphases. The school support staff expressed dissatisfaction with their term appointments. One of the consultants especially agreed with the last item in table 2.1:

> "I am learning not to try to meet everybody's needs. The hair you see on my head is not from a haircut. I'm frazzled." (C)

In Part II we will provide further analysis of East County in comparison with the other three cases, with respect to factors affecting implementation, innovation at the school level, and overall effectiveness and impact.

CHAPTER 3 REGION NORTH: OFFICIAL MODEL AND MODEL AS PRACTISED

Region North serves a mix of densely populated surburban to sparsely populated rural communities. In contrast to the majority of Ontario school boards, the Board is experiencing an increase rather than a decline in enrolment. The Board's planning office reports an increase of 1800 students in the 1980-1984 period and projects a much greater increase over the next five years. The total student enrolment in 1984-85 was 46 000, with 77 elementary and 15 secondary schools divided into four geographical regions. The Board consists of 20 elected trustees. A Director of Education serves as the chief administrative officer and Secretary Treasurer of the Board. He is assisted by four Divisional Superintendents - School Operations, Planning and Development, Human Resources, and Business. These five centrally based senior officials make up the Executive Council.

The Superintendent of School Operations is responsible for the day-to-day operations of the schools, including such matters as enrolment, staffing, budgets, boundaries, and accommodations. Reporting to him are a Superintendent for Special Education and Student Support Services, and four Superintendents of schools, who manage school operations in each of the four geographic areas of the Board. Assistant superintendents of schools are appointed in the two areas with the greatest number of students. The line officials are also responsible for the supervision and promotion of principals, and through the principals, for the supervision of teachers. Area level officials and staff are based in area offices.

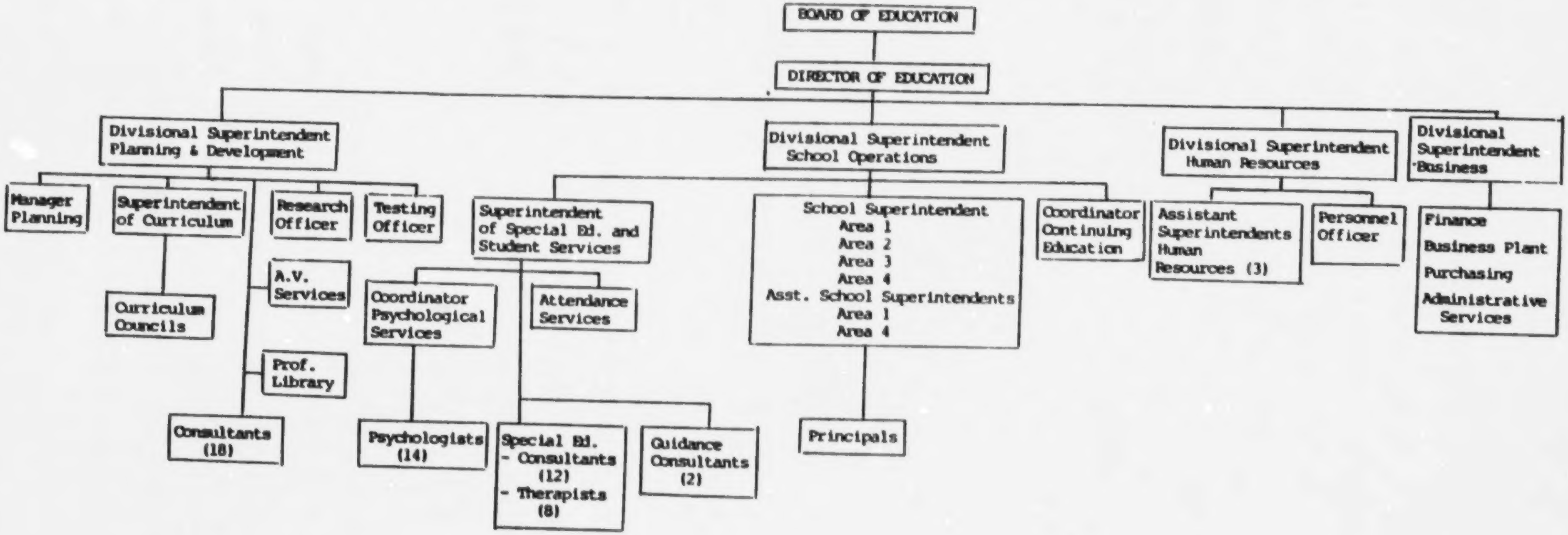
The Superintendent of Planning and Development is responsible for system-level curriculum development, professional development, facility planning, research, testing, the Professional Library, and AV support. Central curriculum development activities are monitored by a Superintendent of Curriculum. They are managed and carried out by three system-level Curriculum Councils - Primary/Junior (K-6), Intermediate (7-10), and Senior (11-13) - and ad hoc task forces created by the Councils in response to specific curriculum development needs across the system.

The Superintendent of Planning and Development oversees the work of 18 professional development consultants, whose assignments range from specific subject areas (e.g., English, Science) to divisions (e.g., Primary) to special concerns (e.g., Multiculturalism, Computers). The consultants' offices are located in a former school, which also houses a Teacher Centre and Computer Resource Centre. Planning and Development also co-ordinates the provision of off-campus courses for teachers through a nearby university, and collaborates with the local teacher federations and schools in the planning and delivery of in-service training on regional and area professional days.

The Divisional Superintendent for Human Resources is responsible mainly for general personnel matters within the school system. There are three Assistant Superintendents for Human Resources (ASHR) who have special responsibilities in staff and program supervision. Each ASHR is assigned to approximately 30 schools, or one-third of the system. The ASHRs supervise probationary and problem teachers, and conduct external evaluations of school programs.

The Director of Education and superintendents from all divisions and areas meet together as an Administrative Council. An organizational chart depicting the overall administrative structure of the Board is depicted in figure 3.1.

Figure 3.1 Organizational Chart


BOARD OF EDUCATION
DIRECTOR OF EDUCATION
Divisional Superintendent Planning & Development
Manager Planning
Superintendent of Curriculum
Curriculum Councils
Research Officer
Testing Officer
A.V. Services
Prof. Library
Consultants (18)
Divisional Superintendent School Operations
Superintendent of Special Ed. and Student Services
Coordinator Psychological Services
Psychologists (14)
Attendance Services
Special Ed. - Consultants (12) - Therapists (8)
Guidance Consultants (2)
School Superintendent Area 1 Area 2 Area 3 Area 4 Asst. School Superintendents Area 1 Area 4
Principals
Coordinator Continuing Education
Divisional Superintendent Human Resources
Assistant Superintendents Human Resources (3)
Personnel Officer
Divisional Superintendent Business
Finance
Business Plant
Purchasing
Administrative Services

I OFFICIAL MODEL

The official organizational approach to curriculum implementation in Region North centres on the development, implementation, and evaluation of curriculum initiatives undertaken through the three Curriculum Councils. We call it the curriculum-development approach to implementation in the text of this report. This organizational design was first laid out in a mid-1970s report entitled "A Proposal for a Standing Organization for Curriculum Development and Implementation", which was the basis for establishing the Curriculum Councils. Further specifications have appeared in a variety of forms: official memoranda from the Director and from Divisional Superintendents; a Curriculum Council handbook; statements of system priorities; and the establishment report for the present consultative services. Additional insight into the organizational model for implementation has been gained from Year End Reports from the Planning and Development Division and from the initial report of a Curriculum Task Force formed by the Administrative Council in the Fall of 1984 to review the Board's approach to implementation.

Goals/Purposes of the Process

The Curriculum Task Force described the "purposes" of the curriculum review, development, and implementation process as follows: to encourage the involvement of teachers so as to draw on resident curriculum-development expertise, to enable teachers to adapt curriculum to student needs, and to create teacher ownership in the curriculum they use. Overall, the process was designed "to ensure a systematic response to Ministry of Education guidelines so that local programs were comprehensive and consistent with the spirit and purpose of Ministry policy" (underlines added for emphasis). The subprocesses of curriculum development, implementation, and review were supposed to be closely related.[4]

The role of the Board and of teachers in response to Ministry curriculum policies is stated in the school system's 1980 "Statement of Priorities Related to Program" as follows:

> The role of the Board is threefold:
>
> (a) to interpret what the Ministry has said, to the local system, to identify and supply support needed by teaching staff, and to require and assist each school staff to develop school programs reflecting the Ministry and Board guidelines;
> (b) to be sensitive to local values and concerns and to ensure that these are given full consideration in the programs approved;
> (c) to set up a monitoring system to ensure implementation is consistent with Ministry and Board intent.
>
> The role of the individual teacher is to translate these programs into classroom activities.

In summary, the curriculum-development approach to implementation in the Region North Board was designed to be responsive to Ministry curriculum initiatives, while maintaining the ideals of teacher participation and curriculum decentralization. These ideals are consistent with the policies of the Ministry of Education with regard to curriculum change as enunciated in the mid-1970s.

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[4] Our local reviewer communicated that the process was structured to create "intersecting lines" of authority among Planning and Development, Operations, and Human Resources authorities in the process of development, implementation, and control.

Overview of the Curriculum Process

In Region North, "curriculum" is officially defined as the written instructional plans of teachers. The overall approach to curriculum development and implementation is two-tiered. The first level involves the production of Regional curriculum guidelines through the Curriculum Councils under the Planning and Development Division. As described in the Curriculum Council handbook:

> The purpose of a Region curriculum guideline is to assist teachers in the implementation of new Ministry guidelines. These Region curriculum guidelines help teachers identify prescriptions and priorities. These prescriptions must form part of programs within each school....A region curriculum guideline is to be a plan or pattern for planning not a lesson plan or course of study.

Implementation at the school level refers to three basic areas of activity: the writing of school courses of study consistent with Ministry and Board guidelines; the translation of these courses of study into unit/lesson plans and classroom activities by individual teachers; and actions taken at the system and school levels to assist in accomplishing these two objectives. Course of study is defined in a 1979 memorandum from the Director:

> A course of study is developed within Ministry guidelines. It is the plan used by teachers to give them directions for instruction over the term, the semester, or the school year. It contains the following elements: objectives, content (with flexible time guide), methods or approaches, teaching materials, evaluation.

The images of curriculum development and implementation overlap in the production of school- and classroom-level curriculum documents. The Operations Division is officially responsible for implementation on the part of principals and teachers. The Planning and Development Division provides curriculum and professional development support for implementation.

Curriculum implementation in the schools is officially subject to two kinds of program supervision. Internal program evaluations are the responsibility of principals and their staffs. External evaluations are performed by the ASHRs (assisted by principals selected from other schools) in program areas designated by principals in the target schools. The identification of problems in curriculum or instruction can lead to further implementation activities in the sense described above.

Central Development, Planning, and Delivery

Each Curriculum Council includes representatives from the following groups: principals, lead teachers (elementary) or department heads (secondary), special education personnel, program consultants, and the teacher federations. Participation is voluntary and membership is for two years, with a 50 per cent annual turnover. They co-operate with Board officials in determining the curriculum-development needs of the system, and manage the curriculum-development work of program Task Forces. The Task Forces are ad hoc committees of volunteer teachers and principals, who are given specific charges to produce Regional curriculum guidelines and other curriculum-development projects. The overall timeline for central curriculum development ranges from two to five years.

One of the Curriculum Council's official responsibilities is "to assist the principals in planning the dissemination and implementation" of Ministry curriculum guidelines in their divisions by "identifying the need for staff workshops, intervisitation, and other professional development activities". Planning and Development Task Forces, consultants, and superintendents also contribute to staff-development planning. If staff-development needs are identified, whether before or after implementation gets underway, the Planning and Development Division is expected to organize an appropriate response. This does not mean that all guidelines are accompanied by a structured in-service program.

The routine procedure for distributing Regional curriculum documents is straightforward. The Planning and Development Division mails two copies to each school for which the document is appropriate, along with a requisition form for additional copies as needed.

School-Level Implementation

The Board's expectations concerning the process for developing courses of study were officially stated in a 1979 Memorandum to principals from the Director of Education:

> In elementary schools, courses of study should be developed and written by teachers working together as a division.... The immediate supervisor of this planning activity, assisted by lead teachers where they have responsibilities for courses of study, is the school principal.
>
> In secondary schools, courses of study are developed and written by teachers working in groups (sometimes individually, e.g., in machine shop or theatre arts) within a subject department. The immediate supervisor of course-preparation is the head of department.

The rationale for collaborative planning is to facilitate information exchange and consensus among teachers in order to create consistency and continuity in the curriculum. These procedures follow those recommended by the Ministry of Education. A 1982 Memorandum from the present Director clarified expectations regarding the length of school-program documents which were to be short statements in the range of four to six pages.

Teachers writing curriculum in the schools do not have to follow a prescribed procedure. There is, however, a recommended sequence of 10 steps. The process begins with an analysis of the "gap" between what is currently in place and what the guidelines require, in order to then specify what needs to be done. It provides for inclusion of required curriculum components.

Principals and their staffs are expected to develop courses of study, but when they do is essentially up to them. As a result, the implementation of each guideline proceeds on a broken front once the documents have been handed out. Once a school program is developed, it is the individual teacher's job to write unit/lesson plans and teach in ways consistent with the curriculum and guidelines. Principals, department heads, and Area School Superintendents are accountable for ensuring that teachers comply.

Implementation Assistance

Region curriculum guidelines are the major form of assistance to school staffs in developing school curricula consistent with

Ministry guidelines. The Curriculum Councils can also activate Task Forces to produce **curriculum aids** which offer practical suggestions to teachers in response to specific needs identified in the system. The use of curriculum aids is, for the most part, optional. They may be accompanied by a similar range of implementation activities set out as guidelines.

Professional Development Days provide a time for school staff to engage in implementation activities. They are entitled to nine PD days each school year. Of these, one is scheduled regionally and one for each area for general professional-development events. Under the supervision of Area Superintendents, principals and their staffs decide how the remaining days are to be used. Acceptable professional activities fall into three broad categories: curriculum development, implementation, review; professional development of teachers; parent interviews, year-end administration.

When the Curriculum Councils were established, the Board adopted the position that "professional development will be related to, and based on, plans for curriculum development and implementation." There are five major sources of professional development assistance: Curriculum Councils and Task Forces, Consultants, Regional/Area Professional Development Committees, liaison program with local university, and course-fee subsidies.

The Curriculum Councils can organize special Task Forces to develop in-service responses to specific teacher needs. Such projects may come about in response to teachers needs recognized in the early or later stages of implementation. Task forces that write guidelines and aids may ask, or be invited, to conduct initial in-service activities related to their use in the schools. The Planning and Development consultants, however, are the key professional development arm of the Board. The official role of consultants is reviewed later in this section.

Region- and area-level Professional Development Day activities are planned by representatives from the teacher federations and from the Planning and Development Division. The Board cannot dictate the program of in-service activities sponsored by the teacher federations, and so their relationship to system curriculum initiatives depends on whether or not priorities of mutual interest coincide.

The Board has an arrangement with a neighbouring university whereby a variety of upgrading courses are offered after school hours at satellite campuses throughout the Region. It also has a tuition-fee plan for "courses considered to be of special value to the system". Guidelines are most likely to benefit from the support of university courses and tuition subsidies in situations where a definite gap in local-content expertise is seen to exist, or in response to major new initiatives from the Ministry.

Evaluation of Curriculum Development and Implementation

Principals and teachers in every school are expected to review the state of their programs each year, and to effect necessary improvements and changes accordingly. There are no formal procedures dictating when and how the in-school program evaluations should be done.

The key organizational structure for Region-level school-program evaluation is the process for program supervision under the three ASHRs. A major purpose of these program evaluations is to ensure that Board and Ministry guidelines are being followed. As initially conceived, these program evaluations were also intended to function as a mirror to the system, because program quality and implementation in the schools would be an indicator of the quality of direction and support provided by the system. Schools select which programs they want reviewed. The evaluation team includes one ASHR and at least one principal from another school. Following a standard process, the evaluations are planned with the principal and staff. The visit includes classroom observation and the examination of written curriculum documents. If follow-up action is recommended, the principal is responsible for its initiation. Area School Superintendents are supposed to monitor and help if needed. The Planning and Development Superintendents are expected to provide professional-development or curriculum resources identified as needs as a result of the supervisory process. In principle, school programs are supposed to be evaluated every five years. Every August the Administrative Council meets for several days to set priorities for the coming calendar year. At this time the ASHRs submit an annual report based on the data gathered from their supervisory visits across the system. The report highlights the strengths and weaknesses of program and instruction in the schools.

Program supervision is distinguished operationally from the performance appraisals of teachers and principals. Principals are supposed to do a comprehensive written report on each teacher every other year. Similar performance reviews of principals are carried out by the Area School Superintendents. The performance evaluations of teachers and principals are not explicitly linked to the implementation of curriculum guidelines.

Official Consultant Role

A professional-development support system of Master Teachers existed from 1969 to 1983. Master Teachers (MTs) were school-based subject specialists, with classroom teaching (40 per cent) as well as professional-development (60 per cent) responsibilities in specific grade divisions. MTs served as "staff" consultant teachers. Their main mission was to help teachers become better teachers in a collegial non-coercive way, and their services were not directly linked to the implementation of centrally sponsored curriculum initiatives. Use of their services was voluntary, and they were prohibited from reporting on teachers to principals and Superintendents. MTs had no explicit curriculum-development duties, but could participate on curriculum committees in a non-leadership capacity.

The scope of MT appointments was reduced from K-13 to the elementary and intermediate grades in the late 1970s, following a strike by secondary teachers in which most MTs did not participate. The gap in consultative services for secondary teachers became a concern in the 1980s, in anticipation of new curriculum initiatives by the Ministry at that level. This led to the creation of the current K-13 Consultative Services Program in the Fall of 1983. Six of the original 16 consultants had previous experience as MTs. From an organizational standpoint the reorganization was marked by the following changes: loss of teaching responsibilities; assumption of full-time consulting duties; extension of responsibilities to all grades; relocation of consultative staff outside the schools; standard five-year appointments.

The current job description for consultants in Region North is reproduced in table 3.1. Like the MTs, Planning and Development consultants provide a general professional-development service to teachers (items b, f, g). One notable change was the addition of explicit responsibility to assist teachers with the implementation of guidelines and Board priorities (items a and d). Also, as with the MTs, use of consultant services is voluntary; consultants do not report on teachers and they have no curriculum-writing duties.

The job description for consultants provides a general outline of the means by which they help teachers - workshops, courses, seminars, activities directed towards the needs of specific teachers, disseminating information, and providing resources. Other documents indicate that the forms of professional development offered by consultants are basically the same as those offered by the Master Teachers: invitational workshops after school or on system Professional Development Days; school-oriented workshops or consulting visits tailored to requests from particular schools; classroom visits and other contacts with individual teachers. Consultants are expected to be knowledgeable and supportive of guidelines affecting their

Table 3.1 Job Description for Consultant

The job description of consultant (except for Special Education - Operations) is:

(a) to assist teachers in their primary function of transferring curriculum images of an educated person projected by Ministry and County curriculum guidelines to actual student outcomes;

(b) to assist teachers in their critical analysis of teacher-learning theories and in their possible implementation to enrich classroom practices;

(c) to assist teachers with information and resources to cope successfully with social, political, economic, and technological influences;

(d) to assist teachers in interpreting and implementing system goals and the changing priorities of the Board;

(e) to assist the Board in continuous quality improvement by maintaining a formal feedback system of needs for professional resources to teachers. The consultant, however, should deal with issues without having responsibility or accepting opportunities for reporting on teachers;

(f) to assist in building an environment where professional development continues to be a high priority with staff;

(g) to organize and present courses, seminars, workshops, or other activities where general aims of quality improvement as well as specific teachers' needs can be served;

(h) to be responsible for their own continuing professional development through attendance at various courses, seminars, and workshops.

areas of program. More generally, consultants are "responsible to respond to the expressed need of teachers from K - 13, regardless of the subject designation of his/her individual job assignment." We did not encounter any official documents describing the "formal feedback system of needs for professional resources" referred to in the job description.

Consultants are appointed for five-year terms. There is no guarantee that positions in any program area will be retained when the terms expire. Consultants cannot be reappointed without returning to the classroom for at least a year in order to avoid "the ivory tower" syndrome.

II MODEL AS PRACTISED

Part A of this section is concerned with how the official implementation process actually works and what consultants actually do. This is based on interviews with superintendents and Board consultants and on responses to the consultants' questionnaire. A major finding in the interviews was that Board curriculum priorities are not necessarily implemented by the same approach as curriculum guidelines. Part B of this section describes the Board curriculum-priority approach.

A. The Practice of Guideline Implementation

Definition of Curriculum Implementation

We asked Superintendents and consultants what people in the school system usually understood curriculum implementation to mean. The following quotes typify the major variations among answers. The number of superintendents and consultants naming each is indicated.

> Definition #1: Implementation as school staff writing curriculum in response to Ministry and Board curriculum guidelines (S=1) (C=4)
> "I think teachers and staff understand it to mean those activities that take place after the receipt of a Board guideline which they believe to be predominantly the writing of curriculum for their own use."
>
> Definition #2: Implementation as a rationally managed process of organizational change (S=2) (C=2)
> "...taking a product and providing whatever staff and other resources, such as professional development, et cetera, in order to ensure that desired changes materialize."
>
> Definition #3: Implementation as putting things (curriculum guidelines, ideas) into practice (S=2) (C=2)
> "I'm saying to myself that it's using the new Ministry documents. It's taking these documents and putting them into practice in the classroom."
>
> Definition #4: Implementation as a natural consequence of curriculum development (S=1) (C=1)
> "In the past...in many ways, implementation was considered a necessary but natural follow-up to development. People thought that it was only necessary to develop a document, give it to teachers, and they do it."
>
> Definition #5: Implementation as good teaching (S=1) (C=1)
> "I see curriculum implementation as a conscious, deliberate series of decisions about student needs, program, and then student outcomes."

> Definition #6: Implementation as school staff changing in response to program and performance evaluations (S=1) (C=0)
> "I think implementation in this Board fundamentally is connected closely with supervision of program and supervision of teacher performance....In the absence of a formal implementation plan for curriculum other than it's the principal and staff's responsibility, the only initiative to innovate are the supervisory procedures named above."

The different meanings of curriculum implementation reported provide some insight into the way the approach to curriculum change works. The most obvious is the lack of a uniform image of what constitutes implementation in the curriculum process. This is particularly evident in the "curriculum writing" view ascribed to teachers, and the "teaching practice" views expressed by most central-office personnel interviewed. A second point is the shift in perspective at the central-office level from implementation as something that follows naturally from development to something that requires additional support from the system. A final point concerns the ambiguous relationship between curriculum development, supervision, and actual changes in teaching practice.

The Usual Approach to Curriculum Change

We asked superintendents and consultants to describe "the usual approach to developing, implementing, and maintaining curriculum changes in the school system". While everyone agreed on the official process for developing Region guidelines and curriculum aids, they varied in how they described what happens after Region curriculum documents are delivered to the schools.

Some referred to the overall philosophy and strategy for curriculum development and implementation in the schools:

> "Our model is based on the 1975 notion of decentralization of curriculum. Groups of teachers and individual teachers developing curriculum relevant to the needs. The model in this Region took that model very seriously down to individual teachers." (C)

> "The basic rationale is teacher ownership. Teachers know best what their kids need. Curriculum Councils and Task Forces consist of teachers. Curriculum Councils and Task Forces respond to Ministry guidelines. Task Force guidelines go out to teachers. Teachers are expected to develop their own application." (S)

> "Until recently, we relied entirely on the fact that a new document arrived and the professionalism of our staff to see that it was implemented." (S)

Respondents described the actual process of school-level curriculum development and implementation in varying detail. According to two consultants, the response would vary from school to school.

> "There's no specific route that I'm aware of. I can't tell if there is any one way of taking Ministry or Board guidelines and translating them into practice." (C)

> "I can't tell you precisely. The answers would be as numerous as the number of schools and teachers. How it is done would vary by school or department. In principle, everyone will respond by producing a school curriculum congruent with the guidelines." (C)

Several consultants and superintendents simply emphasized the responsibility of teachers (and principals) to develop school programs, and the responsibility of supervisory officers and principals to monitor the results.

> "The completed document is published by Planning and Development. A memo is sent to schools about the number of copies required. Then it becomes the responsibility of the principal and classroom teacher. Each school and teacher is responsible for developing their own course of study. Regional documents are curriculum aids, not courses of study. Program evaluation then takes place through the Assistant Superintendents and co-visitors." (S)

> "Guidelines are sent out to the schools. It is the responsibility of schools by division or department to make decisions about implementation. The final decision as to how, when, and what is made by teachers." (C)

> "Responsibility is given to the Curriculum Councils and Task Forces. That leads to some kind of Board curriculum-guideline document. Guidelines are sometimes supported by curriculum-aids documents. Then it becomes the teacher's responsibility to develop programs. The check on implementation is teacher integrity and, formally the principal with the Board evaluation team from Human Resources." (C)

In their open-ended descriptions of the curriculum-development and implementation process, a few consultants made additional reference to the implementation support roles of curriculum task forces and consultants.

> "Board guidelines are sent to the schools. Sometimes task force members have specific ideas about implementation of the guideline in the sense of bringing them to teachers through professional development workshops or at staff meetings. Or they might address a department or an association. Not all task forces do that." (C)

> "Generally some sort of mandate comes down from the Ministry or Board. Then it is put in the hands of school superintendents who in turn go to the principals, who go to staff and say 'This is what we have to come up with.' One of the things that is different in this Region is that any curriculum writing and documents come from the teachers themselves. Once the principal says do this, teachers get in a panic.

> There's so much else to do. Then the principal usually calls in a consultant to help teachers write some sort of curriculum aid or guideline." (C)

As illustrated in the preceding passages, many of the consultants and superintendents emphasized only the procedures for developing Region- and school-level curriculum documents in their initial descriptions. When mentioned, support for implementation was usually depicted in terms of introductory workshops or assistance in curriculum writing.

Three superintendents gave more detailed descriptions of curriculum development and implementation in the schools. Follow-up probes were used with all interviews to elicit specific information on implementation planning, training and assistance, monitoring and evaluation. These data, combined with findings from the consultant survey, brought into focus key modifications, variations, and clarifications in the official organizational process and roles.

Variation in the Initiation of School-Level Implementation

In the official model for guideline implementation, school-level curriculum planning begins after the dissemination of approved Region curriculum documents. As reported by two Operations Superintendents, this model does not always apply.

> "At the secondary level, the plan is not all that different, though we do not in all cases wait for task force responses. The changes required might be minimal....People at the secondary level with specialities are capable of making adjustments. That's why we let Ministry guidelines go to the secondary schools even before the county response is developed.

> When the task force response comes out, however, I would expect schools to look at it carefully and make further adjustments as needed. It is a misperception about the model that everything is held up until the County response comes out. That is not always true." (S)
>
> "Information or guidelines come from the Central Office. We'd already have the Ministry guidelines prior to receiving the Board guidelines. I expect staff to read and study Ministry guidelines and to do a gap analysis. Some things they would immediately take care of. Others they would wait until the guideline from Central Office came...." (S)

This modification reflects basic differences in Ministry guidelines for different grade divisions. The Ministry's basic Primary/Junior guideline covers all areas of the curriculum. It was converted at the Board level into 15 subject-specific Region guidelines, and was the basis for the official model of curriculum development in the system. Ministry guidelines at the intermediate and senior levels are typically subject-specific. There is less reason for a Region interpretation before initiating a response in the schools. This variation in the timing of initiation does not alter the basic expectation that curriculum be developed by groups of teachers in each school.

Timelines for School-Level Implementation

Superintendents and consultants concurred that school staff decide when to initiate implementation. There is a clear expectation on the part of superintendents, however, that they will follow through.

> "When a Region guideline goes out, we don't expect immediate implementation across the system, but we might say a course of study should be in place in X number of years, or we might suggest that a number of units be in place in X number of years."

While there is no set time for when to begin implementation, there is an expectation regarding the timeline for completing a course of study once work begins.

> "The principal is responsible for maintaining a once-a-year updated plan for curriculum implementation in his school. There is a clear expectation that at least one subject be done each year." (S)

> "We try to avoid people going overboard each year. The five-year plan indicates what programs are to be implemented during a five-year period." (S)

Superintendents also clarified the timeline expectations for unit/lesson planning, once school-curriculum documents are complete.

> "Units and lesson plans...don't have to be developed beforehand. They should be developed during the early years of implementation. The course of study has to be done in advance. The unit and lesson plans can be developed during the first and second years." (S)

Several superintendents said they do not expect the discrepancy between new guidelines and existing courses of study to be the same for all schools, and that their expectations for implementation vary accordingly.

Central and School-Level Planning for Implementation

The notion of implementation planning is unclear in the system. For some, curriculum planning and implementation planning are synonymous. They refer to guidelines and school programs as implementation plans. Others talk about plans which indicate how and when implementation will be initiated and supported.

While superintendents and consultants both referred to the planning efforts of curriculum councils and task forces, central implementation planning is not standardized.

> "Certainly the curriculum committee is involved in planning....There is a point at which development and implementation overlap. Development occurs through the task force assigned by the curriculum council. The task force's response includes suggestions for implementation. Some have details and helpful suggestions and in other cases the advice is more limited." (S)
>
> "There is no clear process for deciding on implementation, though there have been calls for it. Some task forces design implementation plans in the document. These are not really an implementation plan. They are delivery plans. There has been the sense that if you deliver it, you've implemented it." (C)
>
> "There is usually no planning. There is no plan for implementing it....In the past we've concentrated on curriculum development." (C)

Apart from the previously mentioned five-year implementation plans, superintendents emphasized the expectation that school staff would engage in "gap analysis" planning.

> "Ministry guidelines are studied in schools. The school develops a plan for what is to be done. We have, in our Area, a recognized process for doing that (gap analysis). The Board guideline arrives and the two things come together. The staff study the Ministry guideline and the Board guideline. Then they develop a course of study. Then the principal would have to set a timetable for what's supposed to happen. Then it would be his responsibility to put the plan into effect." (S)
>
> "At the school level it varies from very little to quite systematic planning....The obstacles I would suggest would be knowledge, skills, organization, time, and I guess value. The step of implementation planning is not valued by some people. That is different from lack of knowledge....And I would say that the most common plan, if there is a plan, would be gap analysis....Understand the current expectation of the new document. Establish the current status of the in-school program to those expectations. Establish a clear understanding of what a change would look like if the new document was fully implemented. Use the gap between the last two to make better decisions how to go about implementing and mainly, where to put the emphasis." (S)

A specific procedure introduced by the Planning and Development Division helped popularize the concept, but it has not become standard practice in schools. According to one superintendent, "many people would say they use gap analysis, but they would understand it differently and be more or less rigorous in the way they use it."

Several Operations Superintendents spoke of follow-up implementation planning during annual in-school program reviews and in response to external program evaluations.

School-Level Program Development

A number of superintendents reported that the size and scope of school-level curriculum documents has shifted over time, and that there is more latitude now than in the past for schools to share and exchange courses of study and unit plans.

> "From 1975 to 1980 there was quite a wide range from task force to task force in procedures. Some were very prescriptive plus defined timelines. Some were broad. All were intended to go to the school as an overview which were expected to help the school develop its own course of study....At the time schools were writing unbelievable documents...80 to 100 pages. Tremendous amount of time and effort poured into each school's courses. That caused a lot of problems within each school....As time went on, the teachers ran out of steam and it then became acceptable to borrow documents from other schools. They became shorter...five to six pages. Nothing more than scope and sequence. Now we set up a pool of documents. All courses of study are placed in the Area Office to be available for anyone. It was done in each Area, not centralized." (S)

> "I have no problem with schools exchanging documents and unit plans....I try to encourage sharing between schools....The development of the course of study at the elementary level might be done under the direction of a principal or vice-principal, or of a lead teacher....This works well in medium-sized or larger schools, but is extremely difficult in small

> schools....For that reason I have encouraged them to share on a family-of-schools basis rather than trying to do it independently at every single school." (S)

Although region guidelines have always been accompanied by sample courses of study, units, or lessons, teachers were not supposed to adopt them intact. This restriction has apparently been relaxed to mollify teacher dissatisfaction with the burden of writing courses of study. One consultant summed up the implication of this modification.

> "The whole idea of teachers writing the curriculum is going out the window. The idea of sharing already developed curriculum is in."[5]

Implementation Training and Assistance

When asked directly about usual kinds of training and assistance, two superintendents said "nothing". One consultant said, "all that happens is that the principal introduces the document, maybe with staff discussion, in a staff meeting." Most maintained that the sources and kinds of assistance needed vary for different projects and schools.

Data from the consultants' survey yield a composite view of "types of implementation training" provided by consultants and others for 16 projects. Seventy-five per cent or more of the consultants (N=16) checked the following: opportunities for consultation with consultants, opportunities for teachers to consult with each other, written or visual information, content presentations, and demonstration teaching in the classroom. A substantial number (40 - 50 per cent) also checked visitations among teachers, turnkey training of key staff in schools, and classroom observation and feedback. One type of training rarely provided is the chance to try out innovative practices outside the classroom.

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[5] The official who reviewed this report criticized our association of the term "curriculum" with "course of study". Official local definitions notwithstanding, most of those interviewed routinely spoke about writing curriculum where "course of study" would have been the more precise term. Any confusion this causes in the text reflects confusion in the setting over these terms.

Most of those interviewed said that Board consultants were the primary sources of implementation assistance through their invitational and school-based workshops and consulting activities. The support activities of consultants are reviewed later in this section. Project-specific data from the consultants' survey confirm that consultants provide the major portion of training for implementation. Lead teachers/department heads and principals are a distant second. Several of those interviewed noted the workshop contributions of program or in-service task forces and of classroom teachers with recognized expertise. The Curriculum Department has, on occasion, set up special professional-development projects with university consultants. We did not elicit details about these projects, but they are clearly special in that they involve more systematic staff development than in the routine case of guideline implementation. The outside consultants are instrumental in designing the projects and may provide some of the actual in-service, while local personnel provide most of the hands-on staff development and support.

In-school Leadership

Superintendents and consultants emphasized that elementary school principals and secondary department heads mainly were responsible for organizing assistance, providing leadership, and monitoring implementation. The involvement of elementary school principals is said to vary, depending on the principals' interest and skills, particularly as it relates to curriculum development. Some delegate their leadership responsibilities to vice-principals or committees. Elementary school lead teachers often play a key role in assisting principals.

Specific data on the implementation assistance activities of principals, heads, and lead teachers were obtained in the sample-project section of the consultants' survey. Assistance from heads and lead teachers exceeded that of consultants in developing curriculum, securing materials and resources, implementation planning, gathering progress data, and arranging/providing initial training. The main types of implementation training provided by lead teachers and heads were opportunities for user-user consultation, consultation with consultants, and written or visual information. The overall pattern suggests that consultants and lead teachers in the schools tend to complement rather than duplicate each others' efforts.

According to the survey data, principals as a group provide less implementation assistance than consultants and lead teachers. Their contributions were greatest in planning and in developing staff support for change, followed by help in curriculum development, securing materials/resources, and getting central support. Their assistance in staff development was mainly in arranging opportunities for consultation among users or with consultants, arranging classroom visitations, and providing written information.

While the survey data do not suggest a very active role of principals in facilitating curriculum implementation, line superintendents reported a current emphasis on selecting principals with curriculum-leadership skills, and on upgrading the skills of principals already in place. According to one, curriculum experience was a major consideration in the appointment of 14 principals and vice principals during the 1984-1985 school year. Descriptions of effective principal behaviours, emphasizing curriculum leadership, were developed by a Region committee and distributed to principals and superintendents. In-service support for principals focusing on curriculum leadership has increased over the last few years.

Area Office Leadership: Line Superintendent Role

Apart from their general responsibility to help principals organize implementation, and their duties in following up program evaluations, the line superintendents' role in guideline implementation is undefined. Area school superintendents drew attention to specific ways in which they influence curriculum change:

- lobbying trustees for extra money (for in-service training, materials)
- attending and speaking at workshops and meetings

- linking teachers and principals with ideas and resources (consultants, materials, other teachers)
- assisting principals with implementation planning and problem solving
- influencing the use of professional-development time and money in the Areas
- encouraging principals to call on consultants
- selecting principals and vice-principals with curriculum-leadership skills
- organizing implementation-related in-service training for principals
- reinforcing good practices

In the survey, about half the consultants (47 - 57 per cent) said that area school superintendents assisted in implementation planning and decision making, and in developing principal/teacher support for implementation. One-third reported their help in arranging initial training, lobbying for central/Board support, and disseminating information and materials.

There is considerable variability from Area to Area in line-superintendent support for guideline implementation. This is partly due to the presence or absence of an assistant area superintendent to take charge of curriculum matters. As suggested in these contrasting comments, different superintendents also attach varying importance to program implementation:

> "In reality, my role in implementation is pretty limited. It's not a major part of my job, unless there is a concern that becomes evident."
>
> "My first year I focused on budget, staffing, and performance review. Now I focus on curriculum and curriculum management. I care and I see some of that rubbing off on some principals."

Each superintendent has a personal view of how best to facilitate implementation in his or her area. One organized a committee of principals to recommend ways of responding to Region curriculum documents at area principals' meetings. Another works with principals through performance appraisals and in-service training to create an attitude and develop the general skills to facilitate curriculum change. A third talks of linking teachers with resources, clarifying roles, and getting people with curriculum-leadership skills into principalships. The fourth stresses the value of reinforcing good practices.

Implementation Monitoring and Evaluation

Many superintendents and consultants said that principals have the primary responsibility for monitoring implementation through teacher supervision and in-school program reviews. Line superintendents confirmed their expectation that school staff review their own programs at the close of each school year.

> "At the end of the year there is an expectation of a review of all curriculum in the schools. This would take place by division at the elementary level, and by subject or department at the secondary level. At the end of this year, teachers should be meeting together to discuss successes and problems, and identifying needed changes for next year to make the programs better."(S)

> "We encourage ongoing examination of what schools are doing. I hesitate to say once a year. I think that curriculum change needs to be incremental and ongoing. It is unacceptable for a secondary school department not to review and recommend changes to adapt and improve their courses for the next year at the close of each school year."(S)

All those interviewed mentioned the external program-evaluation process. The logistics and procedures of actually carrying out the process across the system were clarified by one ASHR.

> "There are about 40 to 45 requests from my schools. I can only do 20. I completed five in the past five weeks. Each September for our 30 schools we get a list of problem teachers, probationary teachers, or ones that are in trouble, and areas that require program visits in the five-year plan. Area superintendents and principals agree on the plan according to whether particular items are high, medium, or low priority. When was the last visit?
>
> "We take 120 days. It is a shot-gun approach. If you put it on a mathematical basis it would be every 14 years that a program or school would be reviewed. Normally, we work as three individuals in Human Resources. We always take other principals or senior superintendents with us on our review. We are considering a regional review but haven't done much yet. We have a fair amount of autonomy. We decide on our list and we set up a timetable and group visits.
>
> "Courses of study, the way it is being presented, plus how it is evaluated. We monitor the program using guidelines plus program they have set according to the specific objectives. When you go in and reflect all the good things that are happening, you reinforce that. Plus we look for important things for improvement. We set a small number of recommendations rather than a whole list. We established a follow-up procedure as of 1982. The area superintendent writes a letter to the school saying this is good, plus 'what are you going to do about X or Y?'" (S)

While the ASHRs themselves have no authority to see that their recommendations are carried out, area superintendents may require principals to submit written plans for responding to the recommendations.

Interestingly, the superintendents responsible for curriculum and professional development said that the ASHRs have more influence on implementation than the Curriculum Councils, Task Forces, and consultants. Significant changes in program and instruction are often motivated more by the back-end pressure of external supervision than by the provision of front-end assistance (curriculum guides, staff development) to help teachers and principals do it on their own.

In recent years the Curriculum Councils have developed a variety of self-evaluation instruments to help school staff assess their own progress in implementing particular guidelines. These "profiles" provide behavioural descriptions of what a teacher might be doing in implementing the program. The documents and training in their use are available to schools upon request. According to those interviewed, the response from schools so far has been minimal.

Region guideline review and revision represents an area of growth in the original model for curriculum development and implementation. Since about 1982, all the Curriculum Councils have initiated review-and-revision activities as a result of teacher surveys, which showed dissatisfaction with some existing documents, and in response to guideline revisions from the Ministry. By the end of 1984, the Elementary Council had a schedule for review of 16 Region guidelines.

Consultants mentioned their responsibility to provide feedback to the system on implementation needs of teachers. One did a survey of teacher needs for instructional materials in her program area, the results of which were presented to the Executive Council. Two described a formal procedure whereby consultants present case studies about implementation problems to the Planning and Development Superintendent without naming those involved. The Superintendent brings this information to the attention of the Executive Council. Information is exchanged on a less formal basis at monthly consultant meetings.

In the consultant survey we asked consultants what kinds of implementation information had been collected about the project occupying most of their time. Most of the projects were still in preparation or in the beginning year of implementation, so not much data had been gathered. Three types of data mentioned by 40 - 50 per cent of the respondents (N=16) were extent of use, difficulties with implementation, and assistance effects. The most frequently mentioned method of data collection (33 per cent of respondents) was formal and informal consultations with innovation users. In-service planning was the main use of implementation-process data (43 per cent of respondents).

We asked those interviewed what they themselves use as indicators of change. Line superintendents rely on a wide range of informal, as well as the official, measures of implementation status. Most talked about what they learn by attending school staff meetings: staff relations and morale about program change; feedback on progress and problems; and knowledge of staff about current implementation efforts. Several mentioned their own observations of children, teachers, and materials in the classroom. Other indirect indicators of implementation include records of teacher participation in staff-development activities, obtaining purchasing requisitions from principals, program-related presentations to the Board Budget Committee, and comments from parents. Only one superintendent referred to the Board's achievement-testing program.

Consultants depend mainly on informal indicators of change. The two most frequently mentioned are their observations or teacher comments about what students are doing (4), and the ways teachers talk to them about a change (3).

> "...the excitement and interest that students show....The questions students ask when a stranger walks in....When you see students able to work on their own."

> "I can tell also from the questions that teachers ask when you go back in. It shows you if they are ready for the next step, or if they have already taken it intuitively."

> "There are three things that people say that tell me change is not happening....'I'm doing it already'.... 'It doesn't apply to my situation'....'I haven't got the time'....There is also an intuitive indicator. When teachers talk, if the talk always turns to fault and blame directed away from self, it's an indicator to me that implementation is not happening."

Consultants (2) also pick up on what they hear teachers saying to each other and about each other.

> "Another more subtle way is how they are communicating with their peers. It is exciting when I hear from teachers in another school that they've heard that things are working well, and when I hear teachers talking to others about what they are doing."

> "Another indicator is when I see there is a real willingness to share. People who are implementing really want an audience to share what they are trying out with others."

One summed up her assessment of implementation saying "when I've lost ownership then I know I've been successful."

Consultant Role as Practised

The superintendents and consultants interviewed unanimously affirmed that the main role of Board consultants is to provide professional-development support to teachers to help them become better teachers. Support for implementation was the second major reported function of the consultant role. Data from the consultants' survey confirm this dual function. When asked to name their two or three most important responsibilities, the major ones listed were in-service training (72 per cent), helping teachers become more effective (61 per cent), helping teachers implement curriculum programs and policies (50 per cent), assisting in curriculum development (39 per cent) and interpreting curriculum policies and programs to staff and public (28 per cent).

Those consultants who were interviewed also confirmed the duality implied in their responsibility to provide feedback to the system concerning the professional development and implementation needs of teachers, without evaluating or reporting on individual teachers and schools.

> "They are responsible for evaluating if guidelines are being implemented, but not judging teacher or program effectiveness....They bring concerns to Area Superintendents without identifying particular schools." (S)
>
> "Consultants are never expected to report to me or a principal on a teacher, but they should bring all their resources to bear on implementation." (S)
>
> "Consultants have no reporting function whatsoever. They are completely outside supervision." (S)
>
> "...to provide feedback as to needs in the system...with the proviso of no evaluative aspect to that feedback. We are truly not evaluators." (C)
>
> "...it is part of my role to be giving feedback." (C)
>
> "To somehow act as a channel to feedback to the system the realities that exist and to suggest ways to cope with difficulties....I'm not an SO. It's not my role to look for indicators. I'm not hired to look for indicators to judge if change is effective. I'm there to help the teachers on what they want to work on." (C)

The voluntary character of consultant services was also confirmed in our interviews.

> "The basic model is at the request of schools. It is highly voluntary." (C)
>
> "Teachers can take or leave consultant services....Contact rests with the consultants abilities to serve each client." (C)
>
> "They don't have to do anything we say." (C)
>
> "I advise. They don't have to take my advice." (C)

With minor additions, those interviewed gave descriptions of the major sources of consultant activity that were consistent with the official model:

- invitational in-service sessions (PA Days, after school)
- school-oriented in-service sessions (PA Days, staff meetings, after school)
- one-shot or multiple consultations with specific teachers and principals
- presentations at area principals' meetings
- participation in system department-head meetings
- participation on Curriculum Councils, Task Forces, and system committees.

Broadly speaking, Board consultants during the year of our study were involved in one or more of the following kinds of implementation-related activities: giving continuous support for implementation of board guidelines and curriculum aids introduced prior to 1983; assisting in the development/revision of region guidelines and curriculum aids; providing support for implementation of Ministry documents in lieu of, or prior to, the publication of region-level responses; assisting with implementation of board curriculum priorities; responding to general requests from teachers for assistance in curriculum and instruction. Data from the consultants' survey suggest that consultants were involved mainly in "front end" development and implementation support at the time of our study. Of 35 projects named by 16 consultants, 80 per cent were scheduled to begin implementation during the 1984/85 school year or after. Over half (62 per cent) said they were working on two to four innovations at once.

The easiest way to describe the consultant role vis-à-vis guideline implementation is to illustrate what those interviewed and the survey respondents said about consultant contributions at various stages of the guideline-development and implementation process.

Regionally, at least one consultant sits on each of the Curriculum Councils, but consultants do not run the Councils. They participate as resource persons on task forces writing region guidelines and curriculum aids upon invitation. During the 1984/85 school year, 8 of 14 task forces counted consultants among their members. In our interviews, the superintendents repeatedly emphasized that Region consultants are not responsible for writing curriculum centrally (guidelines, aids) or at the school level (courses of study, unit/lesson plans).

No new region guidelines had come out since the consultants took over from the Master Teachers, so we could not get a concrete description of their involvement in the introduction of regional guidelines and curriculum aids. A couple of those interviewed, however, talked about consultant activity to help introduce new Ministry guidelines into the secondary schools.

> "A new guideline would be accompanied by a tremendous amount of consultant activity. For example, there is a new Technical document. The consultant is setting up a full day in-service in my area in April. He asked me (Area Superintendent) to give the Board's perspective. He asked a Ministry person to come in and he asked the content specialist to come in. Leading up to that he's been working with department heads and teachers already. They will have a draft copy of the new guideline. They are doing gap analysis now and identifying difficulties anticipated with implementation. They call the consultant in to discuss anticipated problems with course development and possible technical problems related to implementation. So, because of that preliminary work, the questions they bring to the workshop will be more focused." (S)

> "There are 27 OSIS Science courses coming. What I've done with the draft in planning for implementation is that I've invited Science teachers to examine draft material to validate them and I have gathered their comments and I have forwarded them to the Ministry. That to me is part of implementation. When I have the opportunity with teachers and department heads, I'm continually talking about the new courses in order to clarify and identify what's new, difficulties, and how we could overcome them. This is in the early stages now. When the courses do arrive, then the process we've described before will be set in motion. Then I would hope further dialogue and workshops would come up to deal with problems whenever there are problems." (S)

One of the consultants characterized the overall linkage between region guideline delivery and consultant support in these terms:

> "In a formal way, our involvement could come as a result of a request or decision by Curriculum Councils and Task Forces....For example, a request for a set of workshops from the Superintendents of Curriculum. There would be a direct response on our part to assist teachers with implementation if such a request were made. On the other hand, my experience is that we look at the formal implementation plan and we, the consultants, decide where we want to respond." (C)

Although new-guideline dissemination in the Board was at a temporary lull, schools were still developing courses of study from guidelines introduced prior to 1983. Consultants do not write courses of study, but they assist teachers in other ways upon request.

> "Consultants are very much involved with individual and groups of teachers as they develop courses of study in helping people exchange ideas." (S)
>
> "Consultants don't set curriculum objectives, but they help teachers with ideas for strategies and how to evaluate the success of their teaching." (S)
>
> "As a principal I would call on a consultant at the initial stage to help study and understand a guideline and what the staff needs to do." (S)
>
> "The Master Teacher was anything the consultant wanted to make of it responding to teachers. What teachers lacked in writing curriculum was a framework. If they knew what it was going to look like, some sense of completion point, they could, or would, do it. If it hung together with objectives and course of study they could do it. I developed frameworks and took my show on the road. I worked on it with teachers jointly or sometimes in a more distant way. In some schools the most significant changes took place through doing it with people...spending time getting to know them...trust, observation, demonstration. I observed teachers teaching. They began to ask me for more information. But a lot was up to the individual teacher or school." (C)

Those interviewed talked mostly about the ongoing kinds of support the consultants provide to support guideline implementation, once a course of study is in place. As one consultant put it, "we go in midway to cheer-lead the process."

> "They help staff in working on particular units and help them in sharing ideas about what other schools are doing." (S)
>
> "Consultants are able to spot major concerns and methodology problems and on that basis provide workshops." (S)
>
> "At the implementation stage, consultants offer workshops. There are basically two kinds of workshops. One kind are consultant-created workshops at the system level outside the school. The second kind are workshops in response to school requests at the in-school level. As a principal, I would try to get them into classrooms to do demonstration teaching, working with teachers, linking to resources, and assisting with

new strategies and evaluation techniques. Through that, that would help with the annual review and evaluation, because teachers would become more cognizant of their own needs. I expect consultants to be able to feel free in talking about perceived implementation problems with principals and teachers." (S)

"Right now I offer a variety of workshops on (subject) K to 6 strategies. When I became a consultant I found that some (subject) teachers were not using manipulatives and experiential approaches. They were using the blackboard to teach. I offer many workshops. In these workshops I take K to 6 units and I show hands-on experiments they can do with materials that are readily available to them. By showing them these things, I hope I remove the fear of trying to do that....I offer workshops in developing units of study K through 13. If a teacher wants to develop a unit of study they can come to these workshops, or I will sit with small groups and work on their development....I also demonstrate teaching using the hands-on approach....I come and team-teach. I show the teacher how to manage a class using a manipulative-materials approach....That's the sort of thing I do and probably what I will continue to do when new programs come. The idea is to somehow teach teachers to have strategies that are congruent with these new courses." (C)

"A major one would be formal workshops....It could also mean visiting a teacher and dealing with implementation at the level of that teacher's class. It could be a series of meetings with the teacher to talk about it and clarify what it is and help make connections between different existing programs and the new program. It could mean developing suitable strategies for that teacher in that class....It might be one or a series of contacts involving me, the teacher, and their kids. I might provide a demonstration session which then leads to team teaching of some lessons and then to gradual takeover by the teacher....At that point, exit...but I do offer back-up coaching and reinforcing....It is possible with a few teachers to work up sample units that could be shared with others. (C)

"I've identified three schools, seven teachers. I am working with them on an ongoing basis two or three times a week. Very intensive. In that situation I'm less of a consultant and more of a resource teacher." (C)

> "I'm not comfortable with modelling. That is competitive. Mainly we observe and support and just provide mentoring. Some teachers have a strong sense of what should happen in the classroom, and it's very much in line with implementation. We have to get them over the perceptual barrier and encourage risk-taking." (C)

A couple of consultants said that they get called in "to bolster teachers prior to the Human Resources review" or to help them follow up on recommendations arising from these external program evaluations.

Board consultants make liberal use of outside consultants for PD Day workshops, as exemplified by these two who were interviewed:

> "I no longer act as a presenter at PD Days. My presentations are best done at schools with teachers and principals. I get the best people from the area, people from other boards, people from government and social services. I get people they can't have access to during the rest of the year. They can get me any time. I try to bring in outside experts and put teachers in touch with these people. As a result, a lot of what I do in my job is help keep in touch with leaders in the field." (C)

> "I often invite university personnel to lecture in their own discipline. I bring in teachers from other systems. This year, I've had workshops where I've brought in outside people from a company to demonstrate the use of microscopes. I brought in consultants from a manufacturing company to demonstrate the use of teacher aids they developed that have to do with energy development and use. I have brought people from the Science Centre." (C)

In our survey, 50 per cent of the consultants (N=18) said they had at least monthly contacts with "consultants from other boards". These contacts were judged "very useful" by 44 per cent of the respondents. Ony 20 per cent reported monthly contacts with Ministry officials (28 per cent very useful) and with university faculty (11 per cent very useful).

The connection between consultant support and guideline implementation becomes less direct and visible the longer the guideline has been in place. This is particularly true at the elementary level, where most Ministry and Regional guidelines have been around for five years or more. For example, one consultant described an experimental program being introduced into some Grade 1 classes which involves "presenting very specific teaching strategies that are consistent with the Formative Years (PI/JI Ministry Guideline) implementation, but it is not presented as implementation of the Formative Years."

When a request comes from teachers, the linkage of consultant support to guideline implementation is often indirect, because the teachers may not be asking for help in terms of a specific guideline.

> "A school can call English consultants and say they want to do some work on improving the use of resource centres. They can ask them to come over and help them plan how to work on it. The consultant might suggest resources to contact or might actually get involved in providing workshops and direct assistance. They might just help organize and help the school staff get the assistance they need." (S)
>
> "Consultants also give workshops that are not specific to particular documents or priorities, such as how to make small groups work." (S)
>
> "Many of our meetings with teachers are not around content, rather they are around classroom-management techniques and methods." (C)

In such instances, consultant advice is supposed to be consistent with existing curriculum guidelines, and therefore functions as an implicit support for guideline implementation.

Data from the survey included information on consultant activity across 16 innovations over a two-year period. Half the projects were only at an initial development/revision or validation stage for 1983/84. By 1984/85, the number still being developed or validated had dropped to less than a third. The percentage of consultants providing from a moderate amount to a lot of help in securing materials and resources for the change jumped from 33 per cent in 1983/84 to 74 per cent in 1984/85. The percentage of respondents providing moderate amounts or a lot of initial training rose from 20 per cent to 68 per cent over the same period. Similar patterns were registered for follow-up training (28 per cent to 73 per cent) and providing consultation and reinforcement (60 per cent to 100 per cent). These data illustrate how consultant activity can change depending on the stage of a project's implementation.

Consultants indicated what specific types of implementation training they were providing for the 16 innovations. The following types were each listed by about two-thirds of the consultants (60 per cent to 67 per cent): written information, presentations about content, and opportunities for consultation with consultants. Half said they did demonstration teaching in the classroom, and 40 per cent listed observation and feedback, arranging for users to consult each other and training key resource people in the schools.

Several superintendents and consultants gave their opinions of the characteristics of an effective consultant in the Region

North system. Items mentioned more than once are summarized in table 3.2, with the number of superintendents (S) and consultants (C) naming each. It is interesting that more value is placed on the consultant's all-around teaching expertise than on subject-area expertise.

Table 3.2: Characteristics of an Effective Consultant

KNOWLEDGE		
Subject area expertise	(S=1)	(C=2)
General expertise in teaching and learning	(S=2)	(C=4)
Knowledge of implementation process	(S=2)	(C=1)
Curriculum-development experience	(S=1)	(C=1)
Credibility with teachers and principals	(S=4)	(C=1)
Commitment to Self-improvement	(S=1)	(C=1)
CONSULTING SKILLS		
Good interpersonal and communications skills	(S=3)	(C=4)
Self-directed and takes initiative	(S=2)	(C=3)
Recognizes and works from client needs	(S=1)	(C=3)
Politically astute	(S=1)	(C=2)
Patient		(C=3)
Adaptability to varied needs and circumstances		(C=3)
Able to motivate people		(C=2)
Lets clients take ownership of change		(C=2)

This concludes our description of the curriculum development approach to implementation as actually practised. The following subsection reviews the alternative approach to curriculum innovation associated with Board curriculum priorities.

B. Board Priorities

System priorities for each calendar year are defined by the Administrative Council and approved by the Board each fall. Since the arrival of the present Director of Education in 1981, the number of annual priorities has been reduced, the proportion of curriculum priorities increased, and the timelines for implementation carried over in some cases for more than a year. Under the previous Director, curriculum priorities were managed through the official structure for curriculum development and implementation. An innovative approach to curriculum implementation was introduced in 1982 in conjunction with the official priority given to implementing a Family Life/Sex Education Program in all schools. The perceived success of that process led the administration to adopt a similar approach to implementing a 1984 Language-Development Priority.

The organizational approach to curriculum change associated with these two Board curriculum priorities is regarded at the Central Office level as a distinct alternative to the traditional model for guideline implementation. Here, we describe this Board priority approach to curriculum implementation as reported in our interviews with superintendents and consultants. In chapter 7 of the case study, implementation of the Family-Life project is examined from the perspective of principals and teachers.

The Practice of Board Curriculum-Priority Implementation

The Family Life/Sex Education (FL/SE) effort coincided with the introduction of a Curriculum Aid that was developed by a

Curriculum Council Task Force between 1978 and 1982. For the Language Development Priority, a region steering committee chaired by one of the Assistant Superintendents for Human Resources defined a list of language-development concerns to be addressed by all teachers in the system. In short, the Board priority approach represents an alternative organizational model for implementation, independent of how innovations come to be developed and adopted.

One of the superintendents interviewed gave a detailed step-by-step account of the approach to implementation used with these two projects, drawing specific examples from the FL/SE projects.

> (Int: What are the major components of this approach to implementing curriculum change?)
>
> "Under initiation, first there is an attempt to clarify the intent and purpose of the innovation....A Board committee does this....For the family life and sex education initiative, it was a central office committee with principals added. In the other case, it has been practising teachers including department heads, principals, vice-principals, consultants, and supervisory officers.
>
> "The second component of the initiation stage was to develop a plan to implement that had these elements in it: (a) The plan was differentiated in that it acknowledged that different people might be at different places in relation to the new innovation, and (b) choices were provided as to what you innovated and even to when you would innovate, but there's an overriding expectation that you must implement....They can pick and choose from different components of the innovation. That is very important....
>
> "For example, in the family life and sex education program, parts of it were very uncomfortable for teachers. We felt that they needed psychological as well as technical support. So, to help with technical support we got help from faculty from a university that does sex ed. work. We offered people technical help from them. More recently we have an agreement with York University to provide courses in family life and sex ed. The main psychological support we could offer was not to require people to begin this program until they felt competent and confident. So that's what I

mean that they have a choice. Other psychological support has been provided too. Special resources have been made available. We named a consultant for family life and sex education. The principals were offered training in developing school climate.

"The third component under the initiation stage is that we expanded the change-agent group from just the principal to an in-school team, and we provided in-service training with the implementation plan to the in-school team which included the principal....None of this dealt with the content of the change. It was all with the process of change....It focused on such things as clarity of outcomes expected and the need to consider factors involved in implementation, like previous history, resources available, and so on. It gave suggestions on how to conduct such things as staff meetings, how to conduct community meetings to introduce the change, how to resolve conflict concerning the change and how to monitor implementation. That's the main steps of the initiation.

"The implementation steps are, first, to be sure that the in-school team understood the implementation plan and where to get resources about the nature of the change. The in-school team was not expected to be expert in the plan. We provided them with resources and content experts, though in some cases these were the same people. We asked that in-school team people have credibility with their peers and have good interpersonal skills.

"The second step in the implementation was that the in-school teams were required to meet with teachers expected to make the changes, and to help them understand the expectation of the content and help them understand all the expectations with regard to the process of implementing the document. They were expected to respond to teacher questions about what and when and what kinds of assistance were available. In many cases, outside the school, but inside the County, resources were brought in by the in-school teams to these meetings...people, kits from OISE, films. Another example may be to have a principal from another school, who's already had a community meeting, come over to talk about his meeting or perhaps to talk about how he responded to staff criticisms....

"I left out an important step. Maybe, because it's more a part of language development than it was of family life and sex education. We tried deliberately to make it an interactive implementation plan. We

> accepted in advance that it would be adapted, so we provided opportunities to them to reflect and discuss what was happening in the classroom as they invoked their plans. And we supported and encouraged them in modifying and altering what they were doing on the basis of results that surfaced in the process. That wasn't built in explicitly to the family life and sex education project. It is explicit in the language development priority....
>
> "In the case of family life and sex ed., there was a requirement that a school plan be shared with area superintendents. In the case of language development there is a teacher plan and a school plan required.
>
> "There is a requirement that the level of implementation is to be monitored by the principal and by the area superintendent, and a report has already been made back to administrative council, twice I believe, in general terms, identifying schools' progress in implementation of the family life and sex ed. document."

Another superintendent offered this account of the distinguishing features of the approach to implementing the Language-Development Priority:

> "We have deliberately done the language priority differently. We build in many more of the principles of planned change. Example, clarifying the image, that is, a specific statement by the director to every teacher and working with the leaders, namely principals and area superintendents, to understand the change and the change processes for principals and vice-principals, plus the interaction involved in the in-school teams.
>
> "The in-school team consists of the principal and anywhere from three to nine teachers, depending on the size of the school. These teams are credible and capable. Professional teachers who can influence their peers very effectively. Each school team is chaired by a teacher.
>
> "Another organizer is in-service. Consultants, in-school personnel, and exchanges from other schools, plus steering committees. Most school staff are meeting on a regular basis. We are also promoting networking.
>
> "We've asked every teacher to produce a written plan and this is another organizer. In addition, every school produces a written plan as to how they are co-ordinating their work within the school and sometimes within the area.

> "There is in-service. The consultants are used on request. Teachers are freed. Substitute teachers cover them. PD Days are used to a major extent to focus on language arts. In fact, language arts is pushing other things out of the PD Day. Release time is built into the regular budget. This year I have an extra $50 000 for this. We have a keynote speaker once a month. That is presented on in-school time and does not use up PD Days. We continually talk up the need for in-service.
>
> "A sixth organizer is monitoring. Principals are visited regularly, and they are expected to conduct performance appraisals on teachers in relation to whatever of the 15 components of language arts are selected. Most are happy with this because it gives them some specificity in relation to the 15 criteria. There is a flood of program evaluations in the language area, as well, that have been school-initiated, that is asking us to conduct program evaluation and provide feedback.
>
> "We also selected a powerful committee to steer us - 10 members: three supervisory officers, two consultants, two principals, one vice-principal and two teachers. Other priorities have been crowded out, but as long as you focus on an important area it can be incorporated or spill over into other areas."

As illustrated in the preceding passages, the Board priority approach to implementation has been characterized by a lot of in-service activity, but does not include a common design or strategy for professional development beyond the initial orientation measures for principals and teachers. The Language-Development priority has required more co-ordination of effort among consultants than happens with subject-specific guidelines and curriculum aids. This is a response to the across-the-curriculum nature of the project, not a feature of the general organizational model for Board curriculum-priority implementation.

It is important to note that the approach to curriculum implementation exemplified by the FL/SE and Language-Development Priorities is evolving from project to project. The FL/SE design focused mainly on implementation support during the initial implementation year. The Language-Development design is more elaborated and longer term (five years). It is most innovative in its requirements for ongong implementation planning in the schools, focusing on specific implementation factors (e.g., in-service, teacher interaction, monitoring, continuation).

Summing up the difference between the guideline and curriculum-priority approaches to change, several superintendents (three) commented on the overall shift in organizational emphasis from development to implementation.

> "Until two years ago, there was no follow-through to monitor implementation. Two years ago we started an experimental follow-through with Family Life and Sex Ed. We decided to monitor it and set up a system to support implementation." (S)

> "In the last two years we have begun to have a deliberate initiation stage and a more deliberate implementation stage. Here I'm thinking of an innovation in terms of initiation, implementation, and institutionalization. We have a very deliberate planned initiation stage and the focus has shifted slightly in the implementation stage from supervision to support. The Family Life/Sex Education program, and the Language-Development priority of the Board...(have been implemented in this way)." (S)

Although not mentioned in our interviews, another major difference from the traditional-guideline approach to implementation is that Board priority implementation does not proceed on such a broken front. In a school system characterized by a high degree of curriculum decentralization, this strikes us as a significant shift in organizational practice.

Although viewed with favour within the administration, the future of the Board priority approach to implementation was uncertain at the time of our study. It is likely that some of its features will get incorporated into a new model arising from the Board's Curriculum Review Task Force which we describe in Part II of this report.

CHAPTER 4 WEST PUBLIC: OFFICIAL MODEL AND MODEL AS PRACTISED

West Public is a city Board of Education (population over 300 000). There are 72 elementary and 18 secondary schools with a combined student enrolment of over 40 000. The Board of Education consists of 22 trustees. The administrative structure is depicted in figure 4.1. There are 11 superintendents, including the Director, four central-office superintendents, and six area superintendents.

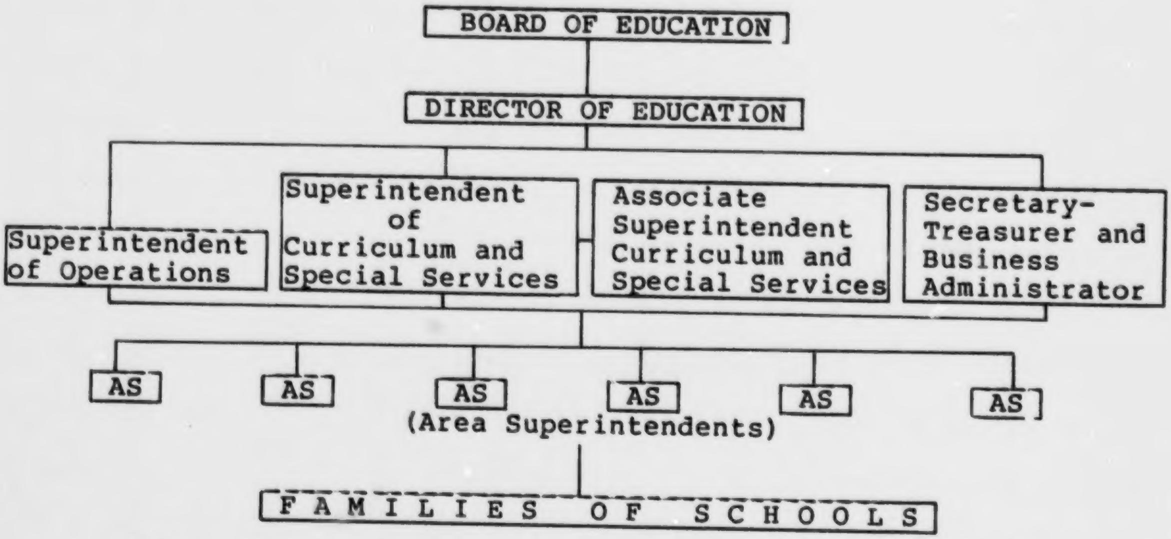
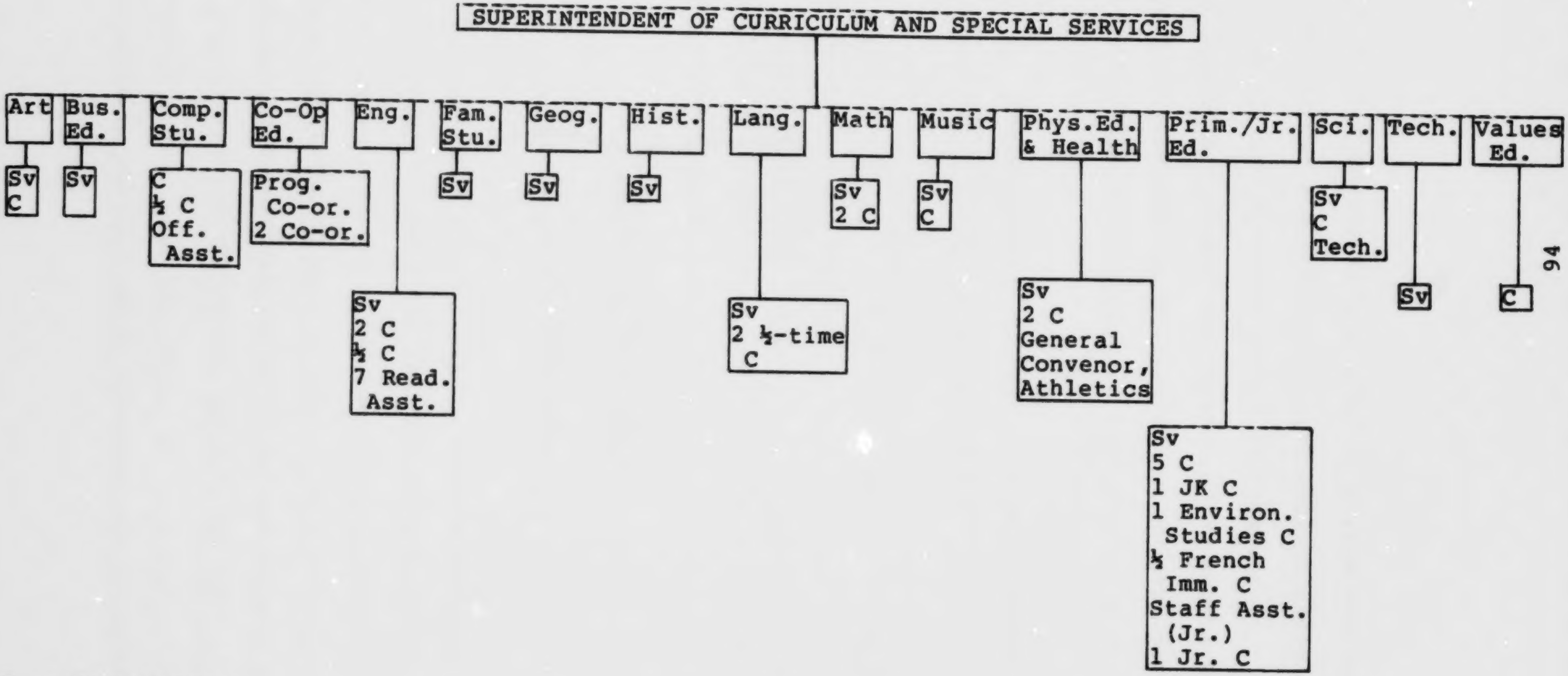

BOARD OF EDUCATION
DIRECTOR OF EDUCATION
Superintendent of Operations
Superintendent of Curriculum and Special Services
Associate Superintendent Curriculum and Special Services
Secretary-Treasurer and Business Administrator
AS
AS
AS
AS
AS
AS
(Area Superintendents)
FAMILIES OF SCHOOLS

Figure 4.1 Administrative Structure of West Public

The administrative-support structure for curriculum is governed by the Superintendent of Curriculum and Special Services as displayed in figure 4.2. There are 13 curriculum supervisors most of whom, with the exception of family studies and primary/junior education, are responsible for subject areas. Some of the supervisors have consultants working with them and some do

Figure 4.2

Administrative Structure - Curriculum and Instruction


SUPERINTENDENT OF CURRICULUM AND SPECIAL SERVICES
Art
Sv
C
Bus. Ed.
Sv
Comp. Stu.
C
½ C
Off. Asst.
Co-Op Ed.
Prog. Co-or.
2 Co-or.
Eng.
Sv
2 C
½ C
7 Read. Asst.
Fam. Stu.
Sv
Geog.
Sv
Hist.
Sv
Lang.
Sv
2 ½-time C
Math
Sv
2 C
Music
Sv
C
Phys.Ed. & Health
Sv
2 C
General Convenor, Athletics
Prim./Jr. Ed.
Sv
5 C
1 JK C
1 Environ. Studies C
½ French Imm. C
Staff Asst. (Jr.)
1 Jr. C
Sci.
Sv
C
Tech.
Tech.
Sv
Values Ed.
C

C = Consultant
Sv = Supervisor

not. Examination of job descriptions and interview data revealed that supervisors are responsible for curriculum development, design and implementation, and working with superintendents. Consultants, on the other hand, are to devote most of their time to working directly with teachers on a request-for-assistance basis. In all there are 21.5 curriculum consultants. Thus the total number of central curriculum support staff is 34.5.

I OFFICIAL MODEL

A new Director of Education was appointed in 1980. Shortly after his appointment, the Director established a Curriculum Implementation Committee and charged them with formulating a system approach. The Committee consisted of the Superintendent of Curriculum and Special Services, an area superintendent, three consultants, three supervisors, four elementary school principals, two secondary school principals, two department heads, a consultant from a university, and a staff-development consultant who chaired the committee. This led eventually to the February 1985 draft of the Curriculum Model printed by the board. It contains sections on rationale and phases of the process: needs assessment, design and development, implementation, implementation procedures, and system evaluations of preceding stages. A summary of the document follows.

Rationale

It is stated in this section of the Model document that many impressive, system curricula have been developed but that several factors, such as staff changes, varied ways in which students learn, and increasing complexity of the school system, have interfered with implementation. The importance of seeing curriculum change as natural and desirable, of ensuring that teachers understand the substance of any proposed change, of leaders providing encouragement, and of removing traditional impediments is acknowledged. A concluding statement is that the system must have a long-term commitment to the review, development, and implementation of curriculum.

A second page in the rationale draws attention to the gap between traditional approaches including direct teaching, inflexible grouping and control, and new goals, such as student participation, unique student needs, and flexible grouping. It is said that if changes in emphasis are not recognized and supported, tradition will act to prevent full implementation of new curricula.

Roles

Because role clarity is generally considered vital in the process of change, the section of the Curriculum Model which summarizes roles is quoted below in its entirety.

> **Changing Role**
>
> Quality implementation requires a collaborative effort. This collaboration encourages new learning and promotes communication among key personnel in the system. Personnel at all levels must work towards challenging traditional beliefs and practices to reflect the philosophy and goals of present curricula.

Supervisors, assisted by **consultants**, will assume the major responsibility for the design of curriculum. However, as experts in methodology and as persons responsible for in-service and curriculum revision, they will also play a key role in the implementation of new curriculum. Supervisors will design learning experiences which will enable personnel involved with the curriculum to develop an understanding of, and skill with, the new curriculum package. The implementation process encourages and indeed demands the involvement of all personnel in the system.

Teachers must believe that change will make a difference in the quality and quantity of student learning. For this to occur, teachers must have an understanding of the new curriculum and of the **concepts** of implementation.

The **principals** in elementary schools and **department heads** or **assistants** in secondary schools will be key curriculum-change agents. Managing the changes will involve new learnings and will require systematic in-service, monitoring, and supervision skills for effective implementation to occur.

Area superintendents will assume a major role in curriculum change. They are responsible both for the provision of adequate time and resources for the implementation of change and for the supervision of the principal in the role as school curriculum leader.

Close communication with principals will generate data requested by the implementation team[6] which will assist in tracking the new curriculum.

The **superintendent responsible for curriculum** will monitor and assist the **supervisors** in managing implementation teams, will work closely with the **area superintendents** to monitor and assist them in their roles as implementors of curriculum and will ensure that the director and trustees are knowledgeable about the status of curriculum.

The **superintendent of operations** will ensure that adequate resources of money, time, and personnel are directed to curriculum implementation, will assist the

---

[6] The Curriculum Model states that the size and composition of the team depends upon the scope and nature of the project. Teams typically include a representative of line administrators, a supervisor and/or consultant, a representative of principals, and several teachers.

> supervisors with the preparation of budgets, and will ensure that the director and trustees are knowledgeable of the resource commitment required. (Source Curriculum Model, West Public)

Emphasis in this investigation is upon the roles of supervisors and consultants. It was noted earlier in this report that supervisors have general responsibility, usually for a subject area. Consultants are responsible to supervisors and provide support for teachers as requested. Unlike the situation in many school systems, supervisors have a part in making decisions about staffing.

Phases

The phases in the process of change are identified in the Model as follows:

A. Needs Assessment

B. Design and Development

C. Implementation

D. System Evaluation

Details are provided in table 4.1. Steps in each phase are listed in order vertically and the overlap of phases can be noted by reading horizontally. It can be seen, for example, that the implementation team is to be selected during the pilot-testing step of the design and development phase. It is important to realize, as well, that levels-of-use charts and final approval for the implementation are a responsibility to be shared by the Design Committee and the Implementation Team. The document includes elaboration of, and instructions for, each phase with emphasis upon Design and Development and Implementation. The system is in the process of further developing the Needs Assessment and Evaluation phases.

The responsibility for curriculum development rests primarily with the supervisor and colleagues chosen to function as a Design Committee. The Design Committee is to prepare an

Table 4.1 Phasing the Curriculum Processes

NEEDS ASSESSMENT	DESIGN AND DEVELOPMENT	IMPLEMENTATION
1.1 Identify	2.1 Design	
1.2 Diagnosis	2.2 Write	
1.3 Research	2.3 Pilot	3.1 Select and Build Team
1.4 Decide	2.4 Key Learnings	
	2.5 LEVELS OF USE	3.2
	2.6 Field Test	3.3 Plan In-Service
	2.7 Reassess	3.4 Budget and Resources
	APPROVAL	3.5 Designs In-Service
		3.6 Area Plan
		3.7 School Plan
		3.8 Collect Data
		3.9 Monitor Implementation Assess Level of Implementation

- Source Curriculum Model, West Public

overall Scope and Sequence for the curriculum, select writing teams, provide in-service for writing teams, and see that they follow the Design Manual. After units are written, the Design Team is to conduct pilot testing of units, often by members of the writing team, under favourable conditions in terms of factors, such as teacher commitment and availability of materials, and then prepare an interim report for the appropriate curriculum committee. The next step is for the Design Team to work with the Implementation Team to identify key learnings for each required role. After this, the key learnings are listed vertically and levels of use ranging from awareness to preparation, routine use, integration, and refinement are arranged horizontally to form a levels-of-use chart for a particular role. The Levels-of-Use charts are then used to assist with large-scale field testing under normal conditions. The final task of the Design Team is to reassess the Implementation Plan and present the curriculum package to the Superintendent for Curriculum and Special Services. Because the focus of this study is on implementation, some additional details from the Model regarding this phase require attention.

Implementation

This section of the Model has a one-page introduction which identifies implementation as a process designed to change student-learning outcomes. It is also stated that each person involved must be given time, resources, and a suitable environment in which to acquire the knowledge, operations, and attitudes required to perform the role effectively. According to the Model, each year, the supervisor responsible for a curriculum project is to renegotiate with the Superintendent of Curriculum the placement of the project on the three-year plan and an implementation budget which includes the cost of materials, personnel, and in-service time. Implementation is defined as consisting of nine procedures (see table 4.2).

There are detailed instructions in the Manual for each procedure. As an illustration, the instructions for designing and implementing a school plan (step 7 in table 4.2) are copied below:

> **Designing and Implementing a School Plan**
>
> This is a set of activities determined by the Principal, Vice-Principals, Department Head, and teachers for the purpose of insuring optimum implementation of a particular new curriculum in the school
>
> Step I **Co-operatively Design a School Plan**
>
> After the in-service, under the leadership of the principal
>
> - clarify learnings from the in-service sessions;
> - clarify roles and responsibilities of teachers, principal, consultants, supervisors, and area superintendent;
> - determine facilities, equipment, other resources, and budget needs;
> - reach agreement on a school-based timeline that will fit within the time schedule provided by the Implementation Team;
> - agree on a plan to implement the curriculum;
> - make sure that all participants know what data is to be collected, who collects each set of data, and how it is to be used.

Step II **Implement the Plan**

Within the timelines established, the principal/department head will

- identify, with each teacher, present placement on Levels-of-Use Chart;
- negotiate with each teacher to set realistic goals for growth over six months or one year;
- aid each teacher in locating resources to meet these goals;
- carry out classroom observations (using a wide variety of techniques) and follow-up conferences as needed;
- provide ongoing information to staff members for encouragement and guidance;
- conduct meetings with all staff involved in implementation to share learnings and concerns;
- allocate time for further in-service where necessary;
- use resources in neighbouring schools when appropriate;
- identify, with each teacher, growth on Levels-of-Use Chart at the end of the time period and set new objectives.

Step III **Assess the Effectiveness of the Plan**

Teachers, under the leadership of the principal/department head, will assess the effectiveness of their school plan by asking the following questions:

- Did we meet our timeline? Was it realistic?
- Did we use each other's strengths effectively?
- Did we use board resources effectively?
- Did we make effective use of our meeting time?

The Model also includes details, such as criteria for selecting writing teams, a guide for planning in-service sessions, and an incentives-and-impediments chart. In addition, there are a sample budget and several suggestions for collecting data in a variety of ways.

The role of the supervisor in implementation is clearly central, as it includes overall responsibility and periodic

Table 4.2 **Implementation Procedures**

	PROCEDURES	GUIDELINES
1.	Select and Build the Team	Size and composition depends upon the project
2.	Create Levels-of-Use Charts	With the Design Committee for each role
3.	Plan the In-Service	Select and prepare teams (re Levels-of-Use Charts and Key Learnings)
4.	Prepare the Implementation Budget	Report to Superintendent regarding pilot tests and budget
5.	Deliver the In-service	With attention to environment, incentives, and evaluation
6.	Design and Implement an Area Plan	Activities are determined by the Area Superintendent in co-operation with chairperson of the Design Team, chairperson of the Implementation Team, and area personnel including teachers
7.	Design and Implement a School Plan	Activities are determined by the Principal and other professional staff of the school
8.	Collect Data	School personnel collect information for the Implementation Team
9.	Monitor the Implementation	Report to the Superintendent regarding final evaluation of the implementation process.

At this point the work of the Implementation Team is completed.

(Source Curriculum Model, West Public)

reporting to the Superintendent of Curriculum. The job description of consultants, noted earlier in this report, is to assist the supervisor with curriculum development and implementation and to assist principals and teachers as requested. One aspect of designing a school plan is to clarify the roles of supervisors and consultants for a particular curriculum project in the school. Another component of a school plan is to determine facilities, equipment, other resources, and budget needs. An attempt clearly is being made to determine required human and material resources and presumably to provide them. It also should be noted that supervisory personnel, according to the Model, are to determine obstacles to the desired changes, and plans should include incentives and rewards to overcome them.

System Evaluation

The System Evaluation of Phases is viewed as being system-wide and conducted by specialist personnel at the Board level who may involve outside resource people. This phase is not yet fully developed but is expected to include steps of planning, development of instruments, pilot/field testing instruments, collection of data, analysis, and recommendations. Recommendations would be made by the superintendent responsible for curriculum to the Academic Council and would focus upon teacher growth and student learnings as well as refinement of the Model.

The 20-page Curriculum Model document is supplemented by an equal amount of related material in the Appendixes. Included are a curriculum-management matrix, a candidate-assessment form for vice-principals, the model for curriculum decision making, sample curriculum year plans, a sample personnel-by-tasks matrix, a step-by-step guide for preparing a levels-of-use chart, and sample interview questions for determining the level of use.

Curriculum Decision Making and Additional Support Materials

Understanding curriculum decision making is central to this study. Figure 4.3, reproduced from Board materials, charts the decision-making sequence. With respect to the second diamond - Curriculum Committee(s) - there are two major Standing Committees. One is called the Elementary Curriculum Committee, and the other the Composite Curriculum Committee.

The Elementary Curriculum Committee's membership consists of:

1	Chairman-	Associate Superintendent of Curriculum
1	Co-Chairman -	Superintendent of Curriculum
1	Secretary -	Administrative Assistant
1	Subject Supervisor	
6	Elementary Principals (1 from each of 6 Areas)	
3	Teachers	
2	Hamilton Principals' Association	
15		

There are three subcommittees, one each for Primary/Junior, Middle School, and Special Education. The mandate of the Standing Committee is stated in terms of three major objectives:

- To review and recommend a long-range plan related to curriculum development and implementation (JK-8);

- To make specific recommendations concerning curriculum which affects the Elementary Schools that can be forwarded to Academic Council or back to the Superintendent of Curriculum and Special Services for consideration, reaction, and reply;

- To review curriculum design and implementation plan at the Elementary School Level to ensure that all of the following criteria are addressed:

  i) Curriculum Documents and Resource Documents contain components 4.1 to 4.15 as outlined in Section 4 of the Curriculum Design Manual.

  ii) Appropriate system in-service is planned in line with the Curriculum Model, Phase 1.

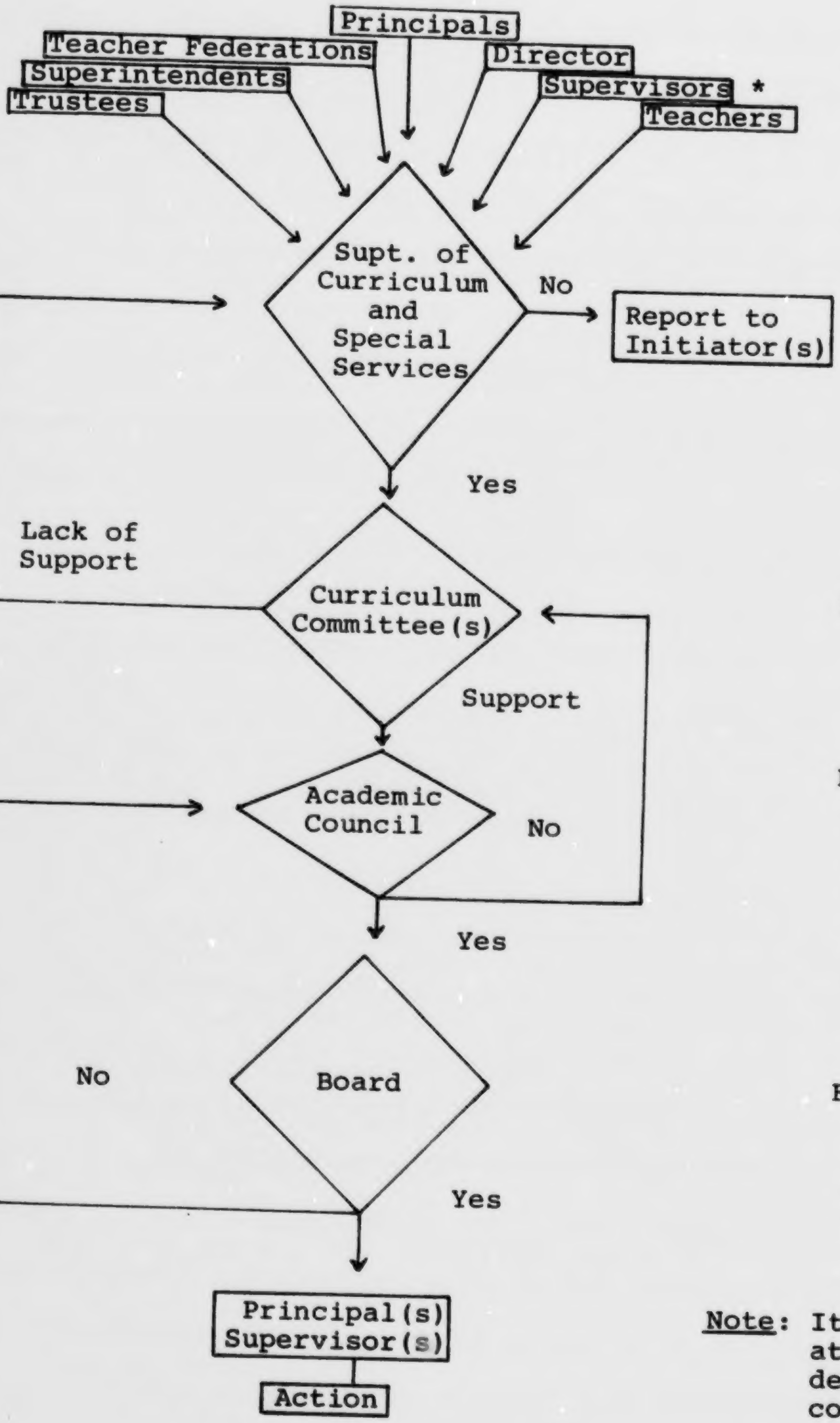
  iii) Appropriate procedures are outlined when a program review is extant.

Source: Elementary Curriculum Committee
West Public

The subcommittees are expected to meet with the appropriate supervisor and/or Design Team for a Pre-writing Meeting and a Post-writing Meeting. In the former, the curriculum plan (writing timeline, in-service plans for writing team, pilot testing, field testing, implementation) and document format are discussed. In the post-writing meeting, the draft document prepared by the Design Team is shared with the subcommittee with respect to its "physical features" and "finalized implementation plans". The purpose of the pre- and post-meetings according to the documents is:

> to lend support to the Design Team in their efforts to develop a document which is congruent with the requirements of the Curriculum Design Model.

Figure 4.3 West Public Curriculum Decision Making


Principals
Teacher Federations
Director
Superintendents
Supervisors *
Trustees
Teachers
Supt. of Curriculum and Special Services
No
Report to Initiator(s)
Yes
Lack of Support
Curriculum Committee(s)
Support
Academic Council
No
Yes
No
Board
Yes
Principal(s) Supervisor(s)
Action

*For purposes of this chart, includes co-ordinators and consultants who are responsible directly to a superintendent.

FUNCTION:
- receive requests for new curriculum or modifications of existing curriculum
- communicate

FUNCTION:
- review
- revise
- recommend
- communicate

FUNCTION:
- receive
- adopt
- modify
- reject
- delay
- determine if Board approval is necessary
- communicate

FUNCTION:
- receive
- adopt
- modify
- reject
- delay
- communicate

Note: It is expected that, at each stage, decisions will be communicated back.

The **Composite Curriculum Committee** also has 15 members:

1	Chairman -	Area Superintendent
1	Co-Chairman -	Superintendent of Curriculum
1	Secretary -	Administrative Assistant
2	Subject Supervisor	
1	Service Supervisor	
4	Principals	
2	Vice-Principals	
1	Vocational Principal	
2	Teachers	
15		

The mandate of the Composite Committee is fourfold:

- To review and recommend a long-range plan related to curriculum development and implementation (JK-13);
- To formulate specific recommendations which affect the Composite Schools that can be forwarded to Academic Council for consideration, reaction, and reply through the Superintendent of Curriculum and Special Services;
- To monitor all new and continuing courses and curriculum design at the Secondary School to determine that the following criteria are addressed (nine criteria are listed, such as need, clarity of objectives, in-service, etc.);
- To review, advise, and make recommendations to Academic Council on such matters as (10 matters are listed, e.g., core curriculum, school organization, new programs, implementation strategies).

Source: Composite Curriculum Committee,
West Public

In sum, the role of the Standing Committees in co-operation with the Superintendent of Curriculum and Special Services is to prioritize and co-ordinate the flow of curriculum initiatives in the system. Note the central role of the Committees and the Superintendent in determining whether or not requests become priorities, and note the overlap in that both committees address long-range planning at the JK-8 levels (with the Composite Committee addressing JK-13).

A **Curriculum-Design Model** has also been prepared by West Public so that there is consistency in topics, format, and style among various writing teams. There is also a multicoloured chart depicting on a grid of subjects and grade levels which programs are at development, implementation, review, or maintenance stages. A handbook of procedures for the growth and development of principals stresses continuous, constructive, and co-operative processes which include long-range planning and evaluation. The duties and responsibilities of principals are listed in the handbook under the headings leadership, professional development, curriculum implementation and review, public relations, and administration of the school. Job descriptions for consultants, supervisors, department heads, and teachers are also in print. A document entitled Directions 1984-85 has also been distributed.

It must be emphasized that the board at this point claims to have the models in place only for the design and implementation phases of the curriculum cycle. It presently has committees at work to develop models for the needs assessment and review phases. They hoped to complete the task by June 1985.

In summary, it is apparent that the adoption of the Curriculum Model for West Public Board can be attributed to such factors as the experience with previous curriculum development attempts, the priorities of a new Director of Education, and concern among central office personnel about the failure to implement curriculum documents that they considered impressive. In addition, the Model incorporated literature on processes of change by emphasizing topics, such as planning for implementation, role clarity, levels of use, in-service, provision of resources, incentives, and monitoring. The plans for curriculum development and implementation are detailed to the point of including task-by-personnel matrices. They are directive in terms of using such expressions as, "the principal/department head will...." Compared to what went on before, the Model was developed to emphasize the importance of curriculum and to do everything possible to ensure successful implementation.

II THE MODEL AS PRACTISED

Data for this section are derived primarily from interviews with the Superintendent of Curriculum and Special Services to whom supervisors and consultants report, the Superintendent of Operations, six area superintendents, four subject supervisors, and nine consultants. Respondents were asked for their views of the system approach and of factors affecting implementation. In addition, results from questionnaires to consultants are used to supplement data from interviews.

The System's Approach to Implementation

Superintendents offered some views of the system as a whole. Two of them described the system as "inbred" and another pointed out that only he and the Director were from outside. One teacher commented, "I feel lucky to have a job since they usually hire West Public people." It was also stated that the Curriculum Model had been applied to the greatest extent at the primary level and that there was now a call for an integrated program at the Junior (Grades 4, 5, and 6) Division. Accordingly, a Junior Division Committee had been established and a generalist consultant had been appointed to offer leadership. The system was reported to be moving toward generalist consultants who are appointed for three-year terms, so that higher divisions could achieve the same level of subject integration as the Primary Division is seen to have. Subject-area people were said to be uneasy about the situation and, as one person commented, "so the battle rages."

Several superintendents commented on the situation before the Curriculum Model was developed. One said, "Excellent materials were not being used." Another stated that the model was really needed; a third expressed the view that people had seen new curricula as "dumping"; and a fourth suggested that the approach now was more systematic.

People typically referred to the printed document when asked about the system's present approach to curriculum implementation. Comments from superintendents regarding the Model include, "It was two years in the making and now we are trying to follow it," "We are at the stage of taking it seriously," and "This is the best paper-endowed board I've ever been in touch with." Another person pointed out that area superintendents now report to both the Superintendent of Curriculum and Special Services and to the Superintendent of Operations. It was also suggested that the Model was a performance-review model with emphasis on objectives and involvement in decision making. The Model was described by another superintendent as highly structured with accountability as a central feature. A typical reaction was that the Model was in the process of being completed and that there would be a degree of uncertainty until the needs-assessment and evaluation phases were developed. More insight into the views of superintendents can be gained by examining the following quotations. Two comments describe the development process:

> "The Model that we are now trying to follow was two years in the making with a lot of discussion. There are summer writing teams followed by pilot tests. In-service starts when pilots are going on and is led by the writing team and pilot teachers. We try to be consistent - about 50 per cent of the teachers know levels of use. We believe in aims and objectives from the Director down and we have major thrusts each year." (S)

> "A review and needs-assessment team has been meeting since October. We are still struggling with the meaning of basic terms, such as review, assessment, and evaluation. There is an elementary principal and vice-principal, a secondary principal and vice-principal, an area superintendent, a supervisor, and two consultants on the team, so that there is a way to keep constituent groups in the picture. They are also able to provide a background for political considerations and expertise in curriculum. The evaluation phase has not really started yet." (S)

The need for a model is highlighted by one central office superintendent:

> "It is a performance-review model based upon goals, objectives, and timelines. It is implemented on a

> limited basis. There has to be a model, but within it you can work on one aspect as well as with 25. We've done too much too quickly and we're swamping principals and teachers. We made some false assumptions that people have more skills than they actually do - that you can hand them a paper and they will go with it."

Two superintendents commented on the focal innovation in this case:

> "The Environmental Studies program proceeded from writing to pilot, field, and system stages with separate in-service provided for teachers, principals, and area superintendents. It is a broken front in that in-service for teachers is farther along than for principals or superintendents - we haven't come to grips with that yet."

> "As Area Superintendent I took the Environmental Studies document plus resource personnel to a special area meeting to 'sell it'. I had to show support, commitment, and enthusiasm. It is necessary to lay out expectations clearly, show them what you are prepared to do, arrange for in-service, and visit schools to review and follow up. There is pressure at the school level, as they have a million things on their plate."

A final remark is a reminder that the model so far is being applied mainly at the K-Primary and Junior divisions:

> "Leaders at the secondary school level do not see program development, program evaluation, implementation, staff development, and teacher evaluation as linked."

Phases of the Model were outlined by superintendents, supervisors, and consultants. Two superintendents stated that priorities are set by the Academic Council, and another said that an idea for curriculum change would go first to the elementary or composite curriculum committee, then to academic council, on to a management committee, and finally to the board. Three of the superintendents described the process of writing curricula and moving on to pilot, field, and system use. Supervisors usually elaborated on the process by outlining, for example, a gap analysis, writing, pilot testing with writer-teachers, field testing with teachers previously uninvolved, and then workshops preceding system implementation. Some provided details regarding workshops by describing brainstorming, selling, small groups, skill-building, and follow-up. Several examples of curriculum-related activities were given.

An art curriculum was said to be in early planning stages, with a report being prepared for the curriculum committee and plans for a writing team in the summer of 1985. On the other hand, an integrated skills program for Grades 7 to 10 social studies was written in 1984-85, will be piloted in 1985-86, and fully implemented in 1986-87. A variation to the Model is being followed in Junior-level English in that the program written over a five-year period is being moved directly from the pilot stage to full implementation. Ten half-day workshops are being provided for one teacher representative from each school.
In-service is also being provided for principals and superintendents.

Consultants frequently commented on the feelings of teachers and provided details of their work with them. One consultant, for instance, said, "Teachers feel inundated with binders and yet want lesson plans, free of jargon and with concrete ideas." Another commented, "Some want everything given to teachers on a platter."

Consultants typically see their work with teachers in relation to the Model as involving writing, pilot, field, ongoing in-service, and system stages. One variation with the Model reported by three consultants was omission of the levels-of-use aspect, and another adapted the levels to form a continuum. A representative sample of supervisors' and consultants' comments are presented below.

The first comment, in a concise manner, relates the Model to people:

> "The Model is an ideal, yet I believe that people really do want to do a good job. When we listen to teachers we keep the Model in the back of our mind and try to help them. There are all levels of teachers from the highly motivated to the reticent - we go to where the interest and readiness is. There is a huge, huge difference in attitude towards change between the elementary and the secondary."

One consultant provided some detail about a particular in-service program in relation to the Model.

> "The in-service sessions have to be set up carefully. The first hour will be a presentation, without jargon, regarding why the new curriculum is needed, the rationale, and what it is supposed to do. Then there will be small groups, each with a writing-team member, with participation being a priority to surface concerns. There will be a homework package and a response sheet for feedback from self and colleagues as a starting point for the next half-day."

Most support staff gave specific examples of applications of the Model:

> "We are looking at existing courses and doing a gap analysis. In my approach at the secondary level, I form a small committee of teachers to develop, pilot, and field test. After that it is ready for system use. Pilot testing is when people doing the writing try out bits of the curriculum. The field test is when the full curriculum is tried by teachers who were not on the writing team. You get a lot of reactions that are new. We have done up to, and including development, but not growth strands nor levels of use - we will soon."

> "We have followed the Model right through. Since last June there has been a planning committee of 24 teachers and they have done rationale, aims, and goals; and they are working on objectives. Two weeks ago it went to the Elementary Curriculum Committee. We have a budget and four people to write this summer."

> "The 'Beginnings' program followed many steps of the Model. For example, there were many teachers involved in writing and in helping with field tests. It went to the Elementary Curriculum Committee, Academic Council, principals' meetings in each area, area librarian meetings, then to teachers in each area in a half-day session."
>
> "We used the curriculum-writing manual and the growth strands, but teachers opposed the levels of use so we left them out since it did say 'if appropriate'. We then had in-service for the itinerant teachers who provided the same for regular classroom teachers. We try not to load teachers with too much jargon or philosophy."
>
> "The new Model is not final, but we used it in 'Getting It All Together'. Teachers were apprehensive about levels of use so we use it horizontally, instead of vertically, to present a continuum. Any profession needs guideposts to indicate where you have come from and where you are going - teachers could see that and placed themselves on the continuum. We had meetings after in-service to decide together 'what is' and prepare a contract for growth."
>
> "We have had writing teams for the past six summers. It is much more refined now with applications from teachers to be on a writing team, interviews, and in-service. Implementation has changed too from a half-day in the early fall to pilots with selected teachers in each of the six areas, feedback, revisions, system field tests, and further revisions."
>
> "First, we have a design team, then we establish writing teams. There needs to be editing on a regular basis, and a report to the design team from the writing team. We are now at the pilot-testing stage so we are not really into implementation yet."

One consultant provided details about implementation of the focal innovation (see chapter 7):

> "Last January the Environmental Studies K-1 binder was distributed and next year the one for Grades 2-3 will be. 1985-86 will end the Board's investment in personnel for the ES curriculum, and implementation will be up to generalist, primary consultants. The K-1 binder was presented at a mandatory, professional development day attended by about 300 teachers. The

> Superintendent of Curriculum and Special Services spoke to show his support, and the Supervisor of Primary was there actually to sell me. I gave an overview of the program with slides and based the presentation on anecdotes involving children. If you want to sell anything ask a child to do it. The teachers saw that the units had been tried by pilot teachers. The teachers were asked to teach one unit between January and June. Now the pilots are proceeding for Grades 2-3."

Print materials regarding in-service on the Model itself for area superintendents and principals were provided to the writer by one consultant. The objective of these activities was "to experience the curriculum-implementation process as outlined in the Model, using the Learning-Environment sections of 'Getting It All Together'[7] as the vehicle." Separate sessions were planned for area superintendents, principals, and teachers during January 1985. The following message was printed as an inroduction to five levels of growth, each with descriptors, in establishing a learning environment in a primary classroom:

> "Curriculum Implementation is a learning process and should be a positive experience. The principal and teacher share the responsibility for establishing a beginning point and formulating a plan for growth. Growth may be from one level to another or may be within a level."

During this in-service there were opportunities provided for administrators to practise classroom-observation skills, and guidelines were given for conducting interviews with teachers in relation to establishing levels of use and making plans for growth.

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[7] "Getting It All Together" is a guideline and practical suggestions in a binder for Kindergarten and Grade 1 teachers respectively. Topics include arranging a classroom, planning a timetable, and setting up activity centres.

Additional information about the application of the Model to the focal innovation, in this case Environmental Studies at the Primary level, has been gained from the consultants' questionnaire. Of the 15 supervisors and consultants who responded, five said the main motive for adoption of the curriculum was the Ministry guideline, and four felt student needs had more influence. The general view was that the change was mandatory with some adaptation expected to meet local needs and to foster ownership and commitment. A wide variety of implementation-training activities was available, with at least two-thirds of the respondents indicating written information, presentations, and opportunities for discussion with other consultants. More than half included networks among teachers, coaching at the classroom level, and demonstration-teaching as part of implementation. It was also reported that some surveys and informal consultations provided information about the extent of implementation and difficulties encountered. Only one or two people said that there was any information about student achievement or the accomplishment of the goals of the innovation. It should be remembered, however, that Environmental Studies is in early stages of implementation and that the school system has not yet finished developing the evaluation phase of the Model.

The system's approach to implementation was described in a variety of ways. Most superintendents are in favour of the more systematic approach represented by the Model. They suggest that it has been developed, and now a serious attempt is being made to implement the Model itself. They support the priority that the

Model gives both to curriculum and to organizational change, in that they report to the Superintendent of Curriculum now as well as to the Superintendent of Operations. Superintendents tended to talk about the Model in general terms, whereas supervisors and consultants usually gave examples of curriculum development and/or implementation.

Roles

One superintendent was of the opinion that very few people needed to know the whole Model. It was generally agreed, however, that every professional role was affected and, as one person put it, "We have to agree on roles before we get the troops all upset." Role clarification received a good deal of attention in the Model, and many similarities can be noted in the remarks of superintendents (S), supervisors (Sv), and consultants (C).

> "The role of area superintendents is to work at Academic Council in setting up priorities, then collaborate with principals in August, finalize them in mid-September, and send the superintendents' objectives to principals by September 30. By October 31, I visit each principal for at least one and a half hours to go over their objectives. I'm pushing principals to have teachers write two or three aims and engage in long-range planning. The principals' role has changed from manager to curriculum leader and they are accepting it." (S)
>
> "My role is to monitor principals - to set goals in the fall and review in May or June. The emphasis this year is on curriculum development, teacher evaluation, and Environmental Studies, so we have area meetings on those topics. We have lots of curriculum - implementation is the thing to see that it gets down to students." (S)
>
> "Here supervisors have some role in personnel decisions. Some supervisors have concerns about this, but personnel is related to curriculum. This

> interrelationship among priorities, curriculum, personnel, and finance make collaboration in central office vital - to have everyone on the same wavelength." (S)
>
> "Principals are managers of curriculum. When they talk of overload, we examine it and take it seriously - what does a Grade 4 teacher have to put up with?" (S)
>
> "The principal is key - no question. They have the authority, knowledge, resources, and power to sanction. So I create an environment to attract top principals, and staff the whole school that way. There is no use having good teachers with a poor principal, or poor teachers with a good principal. My deliberate efforts are with principals, as it would be overwhelming for a superintendent to work directly with teachers - principals do that." (S)

Supervisors shared perceptions, primarily of the role of others, not themselves:

> "Area superintendents so far have done a great deal in improving the main curriculum, in disseminating knowledge to principals, and in providing authoritative encouragement to exemplary teachers. But with the exception of one, I don't see them being much involved in production or implementation. They just don't have the time - they already live in this building three nights a week." (Sv)
>
> "The consultant and I go out to a school and do a first lesson on a particular theme. We then talk it over with the teacher who is to carry on and we go back a month later to follow up. When in a school it spreads by teachers talking informally." (Sv)
>
> "With consultants, we have a mixture of the old demonstration types or solution-givers who say 'Here is the solution - I will take over your classroom,' and the facilitators who work with teachers. We are working towards clinical supervision and development of the teacher - more of this is permitted in the Model." (Sv)
>
> "The department head's role is to monitor, to remove obstacles, call in resources, and organize - otherwise it won't get done. This will be a new role. At the elementary level the principal plays a similar role, but there are limitations since they may not have the background in a particular subject and they have other administrative tasks. To in-service principals, we

> would want to give them guidelines for the whole range of teachers - the old pro, the eager new one, and so forth. We also have a whole range of principals. The area superintendents' role is to provide expectations for principals. The superintendents should be in-serviced by the implementation team regarding ideas, resources required, obstacles likely to be encountered, and what is needed to work with principals and teachers. The area superintendent at area meetings should be plugging away at system-wide priorities, at timelines, at getting principals to act, and at getting feedback on the level of implementation in the system. If it is a politically hot course, like French immersion or Special Education, the Director and trustees might be involved." (Sv)
>
> "I'm not sure of the role of secondary school principals. They do a lot of non-curriculum work in relation to the community, supervising dances and staffing. I don't know what role they can afford to play in curriculum." (Sv)

The first three consultants quoted below expressed a need for some change in their role:

> "As a consultant, I was to write levels of use for principals. I got into so much hot water because one teacher called, for example, to say 'My principal says I'm to be on level 4.' I went to the Area Superintendent on the Implementation Team (Implementation Team and Design Team were the same in this case) and told him that I felt the ES was new and to hang levels of use on it too was a double whammy. He said to trust my feelings and back off. I told the principals that more work had to be done. I realized that area superintendents should provide in-service to principals, but the area superintendents had not had their sessions. I did in-service principals in pilot schools." (C)
>
> "Roles are quite clearly defined in the primary department. The bulk of our time is taken visiting schools usually at a teacher's request - I'd really like more time for curriculum. A big chunk of my time in May and June is taken up in ordering or disposing of materials when we open some classrooms and close others." (C)
>
> "If I do anything in the primary area, I discuss it with those consultants. I don't do enough of this, however, with consultants in other areas such as math." (C)

Other consultants' comments are more descriptive of procedures at the school or central office level:

> "Planning for growth becomes an agreement between a teacher and the principal who is to supply staff, materials, and resources, and ongoing opportunities for interaction."

> "A memo from Academic Council informs us that a curriculum is ready for the system. Implementation is the responsibility of the principal as curriculum leader in the school. Consultants are on call to clarify, provide resources, or share ideas for enrichment."

> "I find area meetings of principals a good place to do business. One area superintendent has invited me to all area meetings, and since this is my first year, most of my work is in that area. It is a tremendous link. I was also invited to do presentations at two other area meetings."

> "Supervisors meet once a month to review co-ordination. They really don't get into specifics - at the consultants' level we attempt to do that....We need communication between subject consultants and generalists."

> "The Elementary Curriculum Committee tends to see itself as a gatekeeper, because teachers are flooded with curriculum, rather than as a co-ordinating committee."

We can now summarize perceptions of roles. Attention is given first of all to central office personnel, then to opinions of area superintendents, supervisors, and consultants.

The roles of the Director and Academic Council were mentioned several times. One superintendent stated, "the Director has to be 'right on top'." Another observed, "the Academic Council members are becoming aware of their own learning style...we help each other...we help the Director and he helps us." According to one area superintendent, it was up to the Superintendent of Curriculum and Special Services to help him move from Level 3 to Level 4, and another reported that his approach to those above him in the hierarchy was to say "Are you serious?... then help me."

Area superintendents offered views of their own role. Comments included, "I monitor principals to see that they monitor teachers," and "I attempt to get into each school three times a month....I try to be collegial with principals and don't put heat on everything at once." One superintendent emphasized that he works with principals and principals work with teachers, whereas another said that he likes to visit classrooms to talk to teachers and to show support for implementation. Staffing was considered a crucial responsibility by one superintendent because schools had to have the principal and all teachers place a top priority on curriculum if implementation was to be effective. In another interview, the creation of trust was stressed ensuring that people would be open about shortcomings and the superintendent could then assist. Some superintendents feel that it is important for them to attend teacher in-service sessions to show support - yet one pointed out that he may be at Level 2 in relation to one new curriculum and at Level 5 in another.

Supervisors are responsible for preparing level-of-use charts for principals, according to one superintendent. Several mentioned that supervisors in that system have responsibilities for staffing beyond what is usually the case.

It is agreed generally among superintendents that elementary school principals and secondary school department heads are key agents of change, as their responsibilities have shifted from those of managers to those of curriculum leaders. The need to attract top people with curriculum background to these positions was frequently mentioned.

The views of supervisors regarding roles were in general agreement with those expressed by superintendents. One supervisor elaborated upon the role of department head by saying that a head needed to monitor, to remove obstacles to change, to organize, and to call in resources when required. This same person believed that principals and teachers had a wide range of needs for in-service, that area superintendents were to make expectations clear to principals, and that implementation teams were to provide in-service for area superintendents. The role of secondary school principals in implementation was unclear to one supervisor but he thought area superintendents, so far, have done a great job in improving curriculum, in disseminating knowledge to principals, and in encouraging exemplary teachers. Two supervisors talked mainly about their own role in going into schools, working with a few teachers, and having ideas spread in informal interaction among teachers.

One consultant stated that she works mainly in situations where there is interest and readiness, so that the Model had been implemented to the greatest extent at the Primary level. Several consultants said that they are "on call" and that principals may alert them when they have suggested that a particular teacher contact a consultant. Most consultants indicate that there are good relationships with people in line positions. Some say that there is also useful interaction among consultants, while others express dissatisfaction with this aspect of their work. The Junior consultant, for example, said that Primary consultants were a good support for her, and the French-Immersion consultant reported that she interacts with colleagues in such areas as physical education and educaton for the gifted. Concerns were expressed by some consultants about a perceived gap between teachers and central office personnel, about the view that some principals do not see themselves as curriculum leaders, and the feeling that some area superintendents appear to be less interested in curriculum than others.

The questionnaire yielded considerable data about the role of consultants in practice. Of the 15 consultants who responded, five listed assisting with the development of curriculum programs and materials as their major responsibility. Three stated that in-service education was the main activity, and three others indicated that management responsibilities were primary to them. A related finding is that 10 of the consultants say that responding to requests from individual teachers ranks either first or second in time devoted to various activities, and that teachers and principals, often in groups, were their major clients. Nine of the consultants stated that most teachers with whom they work are also working with other support personnel, yet these support personnel rarely communicate with one another about particular teachers and/or schools. Questionnaire results also indicate that most consultants are giving a large portion of their time to early implementation activities related to projects mandated within the last year or two.

Some elaboration from the questionnaire data is in order. At least 60 per cent say that they are providing a "moderate amount" or "a lot" of assistance in securing materials and resources for the new curriculum, developing teacher and principal support for it, planning for the implementation, building support among central office staff and the Board, and providing consultation and reinforcement for problems that arise. The same number of consultants indicate that they give"little" or "no" time to monitoring or dissemination to other schools.

In summary, some personnel are viewed as fulfilling the roles outlined in the Model for their position, and some are not. The Superintendent of Curriculum was mentioned several times in his role of assisting and monitoring area superintendents. While the Model stipulates that area superintendents are to provide time and resources and supervise principals, some of them visit classrooms and talk to teachers, some emphasize staffing, others consider trust as basic, and another attends teacher in-service sessions to show support for implementation. Supervisors and consultants appear to work together closely in their roles but, because they are "on call", their role varies from school to school from virtually no visits to regular, weekly visits. The role of supervisors and consultants varies too, depending upon whether a program is at a development or implementation stage. For example, the Consultant for Environmental Studies had devoted nearly all of her time to writing and to system in-service, but would be working with teachers in classrooms more as the program reached system implementation. It was also observed that there is considerable variation in the roles played by principals and area superintendents, as only some give curriculum the priority that the Model requires. In general, the impression is that a comprehensive model has been developed which, on the one hand, has created awareness and a greatly increased emphasis on implementation activities and, on the other hand, is somewhat overwhelming and not yet internalized or co-ordinated. It is a model in the early stages of use, with some parts, such as evaluation, not yet fully developed and other parts, such as implementation, not yet mastered but being applied with some commitment.

CHAPTER 5 SOUTH SEPARATE: OFFICIAL MODEL AND MODEL AS PRACTICED

South Separate is based primarily in a large city (population over 300 000). It has 51 elementary and 7 secondary schools with a total student enrolment of 21 000. The general administrative structure of the Board is outlined in the organizational chart in figure 5.1.

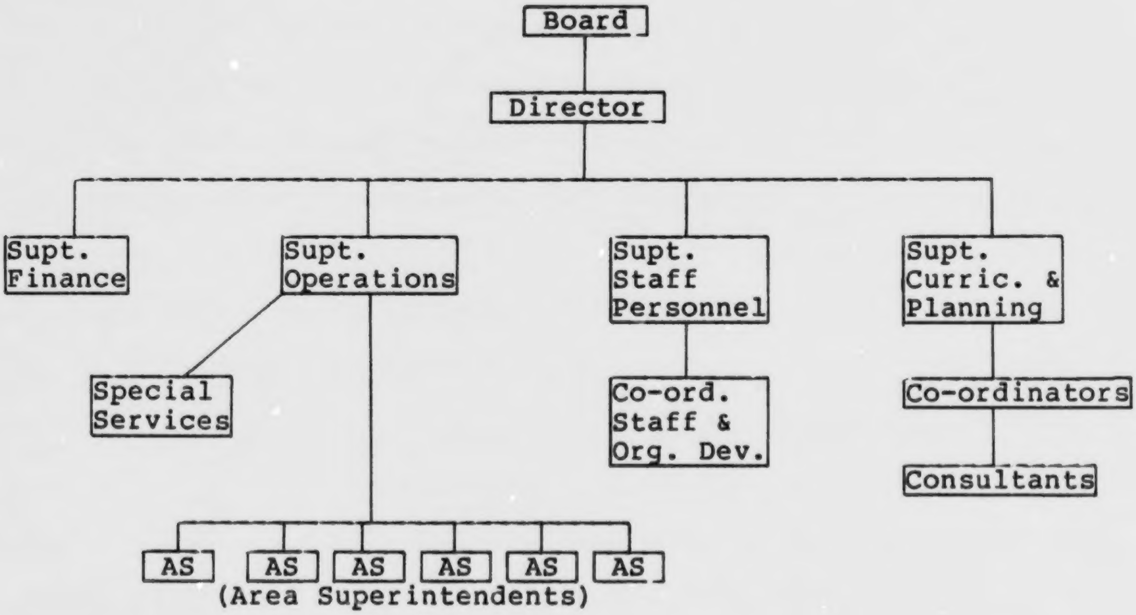
Board
Director
Supt. Finance
Supt. Operations
Supt. Staff Personnel
Supt. Curric. & Planning
Special Services
Co-ord. Staff & Org. Dev.
Co-ordinators
Consultants
AS
AS
AS
AS
AS
AS
(Area Superintendents)

Figure 5.1 **Administrative Structure of South Separate**

As in West Public, there are in total 11 superintendents including the Director - five at the central office level and one each in the six area offices.

The essential co-ordination and support for curriculum is in the "curriculum department" which is under the Superintendent of Curriculum and Planning. Excluding support staff in the learning materials area (library and AV staff) and excluding Special

Education (which is housed in the Superintendent of Operations area), there are 25 co-ordinators and consultants. These consist of five program co-ordinators and 20 consultants reporting to co-ordinators. Figure 5.2 provides the summary.

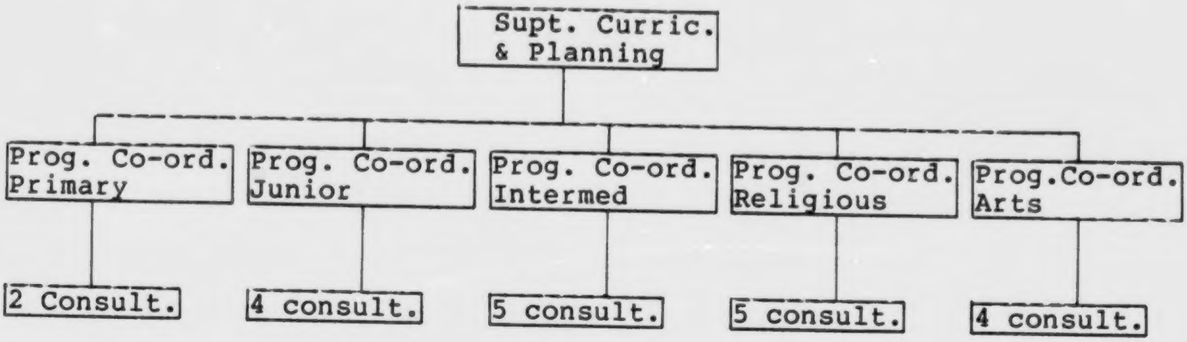
Supt. Curric. & Planning
Prog. Co-ord. Primary
Prog. Co-ord. Junior
Prog. Co-ord. Intermed
Prog. Co-ord. Religious
Prog.Co-ord. Arts
2 Consult.
4 consult.
5 consult.
5 consult.
4 consult.

Figure 5.2 Support Staff Structure of South Separate

Program co-ordinators play much the same role as supervisors of consultants in West Public, i.e., assuming overall co-ordination for the development and implementation of curriculum. In comparing the two figures, note that the co-ordinator of staff development (responsible for staff development programs for professional and non-professional staff in the system) reports to the Superintendent of Staff Personnel, not to the Superintendent of Curriculum and Planning.

I OFFICIAL MODEL

The official model described as early as 1978 is called DIME, an acronym derived from the first four of its five stages, namely, Development, Implementation, Maintenance, Evaluation, and Review/Revision. To paraphrase the Board's document, the five stages represent tasks to be addressed as part of a cycle.

The length of time for a complete cycle is not specified as it is assumed that it will vary according to what else might be happening in the system. The document, however, does give the clear implication that the process is lengthy. Development, for example, is said to occupy a four-year cycle including Year 1: establishing a Core Committee to set out philosophy and objectives, and to obtain acceptance by Academic Council (consisting of the Director, three central superintendents, and three area superintendents); Year 2: setting up Subcommittees to do writing, to develop a working paper and professional development materials, and to obtain the approval of Academic Council; Year 3: use in schools in which the program is tried out in order to obtain reactions, make revisions, and secure final acceptance by Academic Council; and Year 4, in which a Course is developed concerning the introduction of the curriculum to the system.

The Implementation stage is described as an introduction to parents, principals, administrators, etc., through meetings and workshops. It is designed to help teachers achieve the knowledge and understanding of skills and content, an understanding of the structure of the program and content, an awareness of new techniques and behaviour, and an acceptance of the new program.

Maintenance, the third stage, is described in these words:

> When the program has been implemented in the system, i.e., has been successfully established, then it will be necessary to maintain the quality of the program and strive for an improvement. However, it should be noted that each school, and each program within the school, will be at a different stage of the curriculum cycle.

The statement continues by indicating that successful maintenance will require a number of actions, such as appropriate induction of new staff, regular visits by support staff, workshops to improve skills, exchange of ideas, monitoring, and the like.

Evaluation (the fourth stage) is said to include staff evaluation, program evaluation, and student evaluation. Evaluation is described as an ongoing process, but that "there needs to be a summative evaluation on some kind of cycle, probably four or five years." This would mean that the entire cycle could take as long as nine or ten years (four for development, and four or five from implementation to summative evaluation). The fifth stage of program revision is essentially stage one again, i.e., program development.

There are some other procedural support materials in the system, such as a guideline for the development and approval of course outlines, and techniques that individual co-ordinators might use, but there are few system-wide technical-assistance documents available.

On the occasion of a review of the Curriculum Department, to which we will refer at the end of the next section, the Superintendent of Curriculum listed 39 assumptions about the Department and its Review. Some of the most relevant to our study are:

- There is a need for a curriculum plan at Board level.
- The curriculum process will continue to be a supervised function.
- Superintendents are curriculum leaders and they will supervise the curriculum.
- Principals are curriculum leaders within the school and they have a curriculum plan.

- Co-ordinators are principals who have a system-wide responsibility for curriculum.
- Consultants perform duties of assisting in curriculum responsibilities under the direction of co-ordinators.
- Those in support positions will have special skills...in curriculum knowledge and consulting skills, and will share the responsibility for professional development in the system.
- The action of support staff facilitates the DIME model.
- The DIME cycle requires local school ownership.
- There is a DIME cycle evident in all levels of program-planning in the school.
- Important curriculum tasks, once begun, should be seen through to a conclusion.
- Support staff cannot provide assistance to all areas of curriculum, therefore, objectives must be prioritized.

II MODEL AS PRACTISED

Data for this section are derived primarily from interviews with the Superintendent of Curriculum, the Superintendent of Operations, the Superintendent of Staff Personnel, three area superintendents, the Staff Development Officer, four co-ordinators and four consultants. Information from consultants' questionnaire is also reported. These data are reported below under the headings of the system's approach to implementation and roles. For each topic, information from superintendents is reported first, followed by the views of co-ordinators and consultants.

The System's Approach to Implementation

One area superintendent described the system as highly centralized under the four central superintendents (a Superintendent of Business plus the three mentioned above) and the Director. One of the central superintendents explained that the Academic Council, consisting of the Director, three central superintendents, and three area superintendents, would have people appear before it and the response would be either "yea" or "nay". Another area superintendent said that the Curriculum Department is responsible for curriculum development. Direct quotations from interviews with superintendents are given below.

One central office superintendent elaborated upon the development phase:

> "In our approach to curriculum, first a concern is identified. We bring people together to canvas their views. We always try to look at issues in the context of policy, namely, Ministry guidelines. We probe it with a curriculum committee group - it is an interest group or a working party. We have them assemble information, do research, etc. - this generates awareness. They would produce a position paper including procedures on the approach to be taken. This would be taken to Academic Council for approval of both the content and the approach. We would provide a report to the system as a whole. It would be introduced as a pilot project. We now try to go with smaller pilot groups, tighter timelines, and instructions to produce a small paper. People, through pilots, build up their expertise and get committed. We give them one or two days released time to pull information together - maybe there is a summer writing team. We share with principals and ask for a response. All of this is development. The next stage is implementation and we allow people to opt in as they wish. Co-ordinators and principals work out a plan that is right for them. If they opt in, we offer assistance, so sometimes we have to select. Maybe we can only handle 8 of 15 schools that apply."

While less detailed, each comment below gives us an additional glimpse into the actual operation of the Model in South Separate:

> "Our approach is more that certain practices evolve and people buy into them - then we declare it system-wide."

> "Curriculum implementation is usually according to the DIME model. A consultant may appear before the academic council to present a program, such as Language Immersion, and we approve or disapprove."

> "If a Ministry guideline comes out, we look at it and see if changes are to happen. We will be given an in-service about what these changes are by people from the curriculum department. The principals will be given an in-service and take it to their schools."
>
> "Implementation strategies are more or less structured, sometimes within the school involving professional activity days, but they are also eclectic."
>
> "At some point, the principal begins curriculum-development writing at the school. They end up with an in-school document. Schools may work on something together, but I don't push it."

A central feature of implementation in this jurisdiction is the decision making at the school level. It is stressed by the superintendent quoted below:

> "Schools were given an opportunity to opt in, with involvement over a five-year period. Some didn't volunteer, and we would eventually push them. We systematically went through the subject areas in that manner. We tend now to develop mini-documents rather than the ponderous, intimidating things that came out of our earlier efforts. It took 10 years to develop our strength."

Some more general statements about the perceptions of superintendents regarding the actual use of the Model are summarized in the following paragraphs.

In response to a question about the system's usual approach to curriculum implementation, three of the six superintendents referred specifically to the DIME Model and the others described the process with examples. One superintendent produced a grid with the phases of the Model (development, implementation, maintenance, evaluation) across the top and related activities under the categories of administration - Principals, Primary, Junior, Intermediate, and Senior along the left side. Each cell included projects that were underway. For example, implementation at the Primary level listed Partners in Action, religious education, environmental studies, family life education, early identification, classroom environment and strategies, early childhood-K combined classes, language resources guide, language immersion, and the arts program. The usual approach was described as having a concern identified from the schools or from the Ministry, bringing people together to discuss the matter in terms of the "bigger picture", and establishing a curriculum committee to do research, generate awareness, and prepare a position paper which would include procedures. The paper would be taken by the Superintendent of Curriculum to Academic Council and from there it would be reported to the system at large, and pilot programs would be arranged.

Another superintendent, after identifying the phases of the Model, commented that the system was constantly updating, looking at what was going on, and having workshops "all over the place". He observed that curriculum change could come from above or below. One area superintendent described the usual approach as establishing a curriculum committee, chaired by an area superintendent, to look at something and take about one year to produce a system document within the framework of Ministry guidelines. He stated that committee members pilot the program as they go along, provide in-service sessions, and present it to principals. The system's approach to the introduction of curriculum was described as "haphazard" by one person, who went on to say that implementation was not mandated but allowed to evolve, depending upon decisions at the school level.

Another superintendent described the approach as "systematic" when applied to various subject areas and suggested that good people developed good materials in language arts, environmental studies, and mathematics. Superintendents' perceptions of the system's approach to curriculum implementation vary. Most view the development of documents as systematic and implementation as dependent upon decisions at the school level.

In-service, involvement of teachers and principals, and schools opting in are features of the system's approach that deserve some elaboration on the basis of comments from superintendents. One statement appeared to reflect the general view: "We want influence when something is in the making...involvement before the implementation stage." In-service, according to one respondent, may be in the hands of a curriculum committee, academic council, a co-ordinator, or a consultant. Another suggested that in-service sessions given by co-ordinators and consultants, in conjunction with principals, was an important feature of the current approach. In one interview, it was reported that three in-service sessions were arranged for principals with the expectation that they would attend at least one of the three and that they would be phoned if it became necessary to obtain their attendance. Data indicate that in-service activities vary from project to project, utilize leadership from a variety of sources, and address the unique needs of individuals. In reviewing one example of curriculum implementation, an area superintendent said that the principal received an invitation and schools under his/her leadership could opt in over a five-year period. This perception was supported by someone else who said, "schools opt in as they wish."

The following comments by support staff, in many ways, are similar to those made by superintendents.

The first views are related to the Model as a whole:

> "The basic approach is development - implementation - maintenance - evaluation (DIME). There are variations in implementation at the school level. Program-writing is followed by piloting in about six schools where bugs are worked out. After this, there is implementation which involves presenting the program to principals so there is in-service for them first. Principals begin discussion with teachers and/or with curriculum support people that can work in, say, 10 schools. Principals opt in, depending on the readiness of their school - they say when they want a program to be absorbed into their school cycle."

> "Our basic idea is to see where you're going first. Then find out what's going on. We follow the DIME Model. Your develop something, implement it, maintain it, and evaluate as you go along or at the end....Down the road we are looking at doing some testing of students to show exactly the strengths and weaknesses of the program."

> "We set objectives on the basis of the feedback that we get, then we plan and develop a new program including a look at process, personnel, etc. Special attention is given to planning the implementation portion. In one curriculum proposal that is an outgrowth of OSIS, we are working out a joint program with personnel from other boards. I've canvassed teachers and heads regarding their priorities. With the other systems, we have established teams for writing and worked out a pattern for finances. The plan includes the timeline and professional-

> development aspects for teachers on writing teams. A real attempt has been made to follow the DIME Model."

Several of the support staff gave examples of the usual approach to curriculum implementation from their own sphere of responsibility:

> "The way we did it in the arts was to introduce it in the schools through the curriculum co-ordinator and key teachers on the Committee. There were global objectives, specific objectives, content, and strategies. We did it in 10 schools over a five-year period. We went very slowly and carefully. We gave six hours of personalized consulting to individual teachers over a six-month period."

> "In math and English we try to write a vision for the next five years from our contacts with teachers and with outside people from places such as the Ministry. We share this with the Superintendent of Curriculum, and materials may be developed where teachers have concerns, or it may be run by principals for reaction. We may have two or three projects underway at any one time."

> "In September 1983, books were given to principals to give to teachers, and then there was a PD day for all teachers Grades 1 to 6 in 13 schools. The people loved it but were overwhelmed - there were 180 lesson plans, plus extras for primary. We said 'digest it, work on it.' Principals gave teachers an option of doing only parts of it and found out who needed help. From this, teacher needs surfaced and in-service was planned accordingly. These flopped as teachers don't want in-service after school."

> "Our Board has always been an experimental Board. Seventeen years ago people were talking about the language-experience approach. Experts came in and introduced us to that. Then 14 years ago, the British Primary program came in. Seven years ago I discontinued using a basal. We started off with loosely defined ideas but with a set of basic beliefs."

One consultant offered an historical, system view by observing that in the late 1960s there was very little curriculum development, until a new superintendent started an approach that involved large, system committees working towards a change when the new program was shown to schools. He said that that approach had not worked, so now the process included a position paper prepared by a consultant, making trustees aware, piloting the program, keeping principals informed by a newsletter, and offering in-service activities.

Four of the nine co-ordinators and consultants mentioned the DIME Model specifically when asked about the system's approach to curriculum implementation, and others shared examples of curriculum change that were usually in keeping with features of the Model. One co-ordinator described the Model in some detail, stating that at the development phase co-ordinators and consultants get a feeling from the field, form a committee, put materials together, invite principals to pilot the new program, and review feedback within the committee. As this is going on, he said, the chairperson of the committee keeps the Academic Council informed. At the implementation phase, principals are informed, in-service is provided for them, support staff work with principals to arrange in-service for teachers, feedback is received, readiness is considered, and some schools opt in. During implementation, support staff work in the school and, due to limited staff, not all schools can begin at once - in fact only 10 or 12 per year can usually be supported for a particular program. After implementation, support staff withdraw from the school but remain "on call", as the school is expected to maintain the new curriculum. Evaluation is reported to be more prominent now than it has been in the past, and this is observed to be caused, in part at least, by related Ministry guidelines.

Contrasts in the views of co-ordinators can be noted. For example, one co-ordinator claimed that a current curriculum development in his area which included position papers, feedback, review of Ministry guidelines, contact with other boards, a survey of teachers and department heads, writing teams with people from several systems, a professional-development plan including material and human resources required, and a timeline, was "a real attempt to follow the Model". On the other hand, one co-ordinator said it was "hard to say" what the system's approach was, as teachers in his area of responsibility had been left pretty much on their own. Another person, who works at the primary level, did not refer to the Model itself but said that the usual approach was to have a document, provide in-service for the primary team, and then work with invididual teachers by giving demonstration lessons, assistance in planning, and opportunities for dialogue. She indicated that visits with teachers are followed up after two to three weeks and "that is not pressure, but it is too." She noted that it is system policy for support staff to visit teachers only if asked to: "I don't go unannounced." With reference to the Language-Immersion program, a focus for this study, two people noted that it was based upon beliefs regarding children and learning and that it had started with teachers (see chapter 7). They pointed out that this differed from the usual approach in that a written document and formal system approval did not come until much later in the process.

Seven of the 15 people interviewed spoke specifically about the DIME Model when asked about the system's approach to curriculum implementation, while others gave examples consistent with the Model. The common view is that an area for consideration is identified on the basis of Ministry guidelines or a need from within the system. The question is discussed and the matter, if considered important, proceeds to a curriculum committee for a position paper, to Academic Council, back to the committee for development, and to schools for opting in. It has been established that only a limited number of schools can implement a program in any one year, depending upon the availability of support staff. The support staff (co-ordinators and consultants) typically visit schools on a regular basis during implementation in order to do demonstration teaching, assist in planning, and interact with teachers concerning the curriculum. It is system policy that support staff visit classrooms only if invited.

Questionnaires from 17 consultants indicate that implementation in South Separate system is more voluntary at the school level than it is in the three other cases being investigated. The opting-in provision is clearly a central feature of the usual approach to curriculum implementation. Student needs were given by five consultants as the main reason for adopting the Language-Immersion program, and two each mentioned Ministry guidelines, outcomes of pilot programs, and the quality of the innovation as the major consideration. These various reasons are not necessarily inconsistent, as each may have been a way of emphasizing the needs of learners at the

Primary level. Consistent with the above is the fact that consultants listed the purpose of adaptation as improving the fit to local needs and the development of user ownership and commitment. Support staff indicated on the questionnaires that a wide variety of implementation-training activities were available. At least 10 said that written information, presentations, opportunities for interaction with other support staff, teacher networks, and the training of principals and in-school resource staff had been part of the implementation activity for Language Immersion. In addition, six referred to classroom visitations and eight mentioned demonstration teaching. It was also reported that some surveys and informal consultations provided information about the extent of implementation, difficulties being encountered, and student achievement. Questionnaires confirm that the Immersion program is to be implemented in all schools within two years.

While there is a high level of agreement about the usual approach to implementation, there is also some variation in perceptions. It should also be noted that the maintenance phase of the Model is described simply as the period after the support staff ceases regular visits. The evaluation phase appears to have received little attention to date. The four phases of the DIME Model were frequently referred to in interviews. It is not clear, however, whether features of the system's approach, such as in-service, provision for opting in, and implementation depending upon the availability of support staff, are viewed as part of the Model.

Roles

The following comments from superintendents give us some understandings of what people do in the curriculum process.

> "The Superintendent of Curriculum with the help of co-ordinators does curriculum. Co-ordinators are like principals - they are at the same level. The Curriculum Department is responsible for developing curriculum. Part of our task as area superintendents is to see that curriculum is being implemented."
>
> "Area superintendents work with principals and staff in 13 to 15 schools so follow-through is very difficult."
>
> "The area superintendent is the gate to the schools. They carry the message to the schools. They give approval to what is going on, and channel requests from the school to the Academic Council. He needs to support the priorities."
>
> "The principal would say that he or she could do Language Immersion or arts and they would talk it over with the area suprintendent. Consultants too know some teachers and they may take some initiative in trying something new."
>
> "We consider the principal to be a curriculum leader. We emphasize volunteerism, because we expect principals to offer leadership in deciding priorities for the school. There is emphasis on supervision. Area superintendents ask principals for a yearly plan plus how they are going to go about it, what resources they need, and how they are going to draw on the curriculum department."
>
> "The role of co-ordinators and consultants is to have a good, sound knowledge of the particular area, a good, clear philosophy of how kids learn, and be current and up-to-date. There are some who have the knowledge but can't create a following. They charge ahead. There are others who can't meet the demands."
>
> "The in-service by consultants and co-ordinators in conjunction with the principal is an important feature of our approach. Ongoing work by co-ordinators and consultants in relation to principals is very important."

> "In-service may be in the hands of the Curriculum Committee or co-ordinated by the Academic Council or by an individual consultant."

The role of central superintendents was seldom mentioned. One exception was an area superintendent who reported that the Curriculum Department evaluated programs, and that area superintendents and principals evaluate personnel. Another person made the observation that central superintendents were not in schools much and so did not realize how much time was required for curriculum implementation. Evidence of two-way communication in the system was provided by a consultant who believed that initiatives could come from teachers, principals, consultants, area superintendents, or the board level. Specific comments from support staff follow.

Two of those interviewed shared views of the principals' role:

> "Principals are the prime implementors."
>
> "The principalship is an educator's job, not a manager's job. You can innovate and adjust for the school. The principal is key, but I wish some things would take place at the system level. For example, as a co-ordinator, I work with principals, and consultants work with teachers. There is a concern that we need to give more leadership to all schools. Principals want a degree of a core program that is system wide, just as philosophy and approach is."

Most co-ordinators and consultants provided insight into their own role:

> "As a co-ordinator, consultants are responsible to me. As long as they keep me informed, I'm satisfied. It is impossible to keep track of them on a day-to-day basis. I don't expect to have to give approval for what they do, except on major issues. I may recommend approaches to consultants for working with principals and teachers. I also report to the Education Committee on curricular initiatives and concerns in my area."

> "The consultant keeps going out on an on-call basis or if a problem is seen. But the people who aren't calling are probably those who need more help - you have to balance that off. Some principals and staff feel more comfortable with co-ordinators and consultants than others. There is a personality factor involved. You have to know your schools and play by ear."

> "Co-ordinators and consultants introduced the arts program, did demonstrations, did co-operative teaching between teacher and consultant, and eased them into it. We supported teachers' independent work. Their mandate is to continue on."

> "The co-ordinator and superintendents are responsible for many different programs. They delegate a lot of responsibility to consultants."

> "As a consultant, you work with individual teachers in three ways: planning so that the teacher knows how to plan from the document, giving demonstration lessons, and dialoguing with the teacher. You might have a rap session with the teacher regarding problems in implementation....The type of in-service for that teacher depends upon the type of questions asked. We will decide together."

> "Co-ordinators and consultants never evaluate a teacher but we might evaluate the effectiveness of a program. Those are hard to separate out. Sometimes principals sit in with us and teachers to evaluate programs. Some principals might incorporate Language Immersion into teacher evaluation. That is their decision."

> "As a consultant, I went every week into a school to do in-service - not by talking because some teachers were frightened by it - I demonstrated some of the work and so had contact with kids again and then lunch meetings with teachers."

> "We gave them materials. We held their hand and told them it was alright to take the risk. We sent them to visit others who were into Language Immersion....We actually do a professional development plan with a teacher when they get into the program."

Several of the people interviewed commented on the role of area superintendents. Central superintendents indicated that the area superintendents were required to ask principals for yearly priorities and plans, acted as gates to schools by approving programs and channeling information, but found follow-up difficult as they were each responsible for 13 to 15 schools. One of the area superintendents said that he planned for three formal visits to each school each year and that, although he was not heavily involved in curriculum, his job was to help people grow. Another one shared the opinion that because of a high degree of centralization the area superintendent is, in many ways, a powerless functionary. One support-staff person said that area superintendents were to see that implementation takes place. Another indicated that they provide funds for materials, support in-service, and even visit classrooms as a means of recognizing and encouraging implementation. One co-ordinator reported that superintendents encourage principals to visit exemplary classrooms and carefully consider the placement of teachers in terms of the needs and priorities of both the teacher and the school regarding implementation.

The role of the principal was stressed by virtually every person interviewed. Central superintendents see the principal as a curriculum leader who must set priorities with area superintendents and teachers, introduce new programs to staff, and work out an implementation plan with co-ordinators and/or consultants. Area superintendents concur with the above and provide some elaboration: "Principals - their job is to focus upon curriculum matters...we have tried to introduce topics to principals and have them go back and lead the introduction to staff. Before this, they were just part of the audience. Now they are given a lead role and give in-service sessions. Some make a valiant effort and are scared, some are comfortable...."

Another area person claimed that, "If the principal says he or she wants this or that program, the teachers will follow."

Support staff also viewed the principal as a curriculum leader and within this role one emphasized the curriculum cycle (development, implementation, maintenance, or evaluation phase for each subject taught) that was to be in place in each school, one talked of the principal acting as a filter regarding possible changes, and another highlighted the importance of principals providing support for teachers. The support role of principals was stressed by one co-ordinator who stated that they buy materials and accept risk-taking as part of growth. The bargaining positon of the principal was noted by one co-ordinator who stated that if he were a principal he would say to an area superintendent, "I'll implement language immersion if you provide me with a consultant one day a week for the term." The discretion of the principal seems to be accepted, as one co-ordinator reported that principals are given in-service and a handbook for a new program and then if they say, "I don't want it now," fine. One co-ordinator commented that implementation "really varied with the principal". Principals are clearly the key figures in the decision to "opt in" or not. Implementation is officially the responsibility of superintendents and principals.

Many of those interviewed used the terms "co-ordinator" and "consultant" interchangeably. One central superintendent, however, spoke particularly of co-ordinators when he outlined the criteria for selection to be knowledge of a particular area (subject or grade group, such as Primary), experience as an effective principal, enthusiasm, ability to motivate others, respect, organizational skills, and competence in sharing ideas. He also expressed concern that some are working too hard.

Another central superintendent stated that co-ordinators and consultants assist in the evaluation of programs and, "There is no thought of them making a report on teachers or schools." Remarks indicate that superintendents clearly have high regard for the work of the support staff. There is general agreement among co-ordinators and consultants about their own roles. Co-ordinators report that they have monthly meetings and that their role is to "keep track of things" and to report to the education committee. Duties in regard to providing workshops, working with principals, talking to parents, and influencing development were also described. Differentiation between the role of co-ordinator and that of consultant was reflected in the statement of a consultant to the effect that co-ordinators need more of an overview. The consultants' role in working directly with teachers and in classrooms, when called upon, was clearly viewed as central and crucial because curriculum implementation was allowed in a school only if such support could be provided. Data reveal that co-ordinators and consultants typically work together closely. Co-ordinators concentrate more on system concerns and work with principals, whereas consultants are more involved with teachers. They share duties regarding program evaluation and providing for in-service.

Examination of print material reveals that support staff of the primary division plan their activities within the framework of the Model. For example, the plan in the area of language involves four major activities at the development level (developing a Language Resource Book, establishing a writing committee, organizing a Primary Loan Service, and writing support materials through a Language-Immersion Committee), three at the implementation phase (assistance to teachers new to Language Immersion, Principal in-service, student services, and Special Education workshops), three activities at the maintenance phase (program adaptation for enrichment, assessment of materials and purchasing, and continuing assistance to teachers), and two evaluation projects (assessment of resources at one school and long-range evaluation of children in Language Immersion at another school). As noted earlier, during implementation, consultants work directly with teachers in classrooms by offering demonstration teaching, assistance in planning, and dialogue in relation to the new curriculum. The Language-Immersion program appeared to be one of the more thoroughly implemented curriculum priorities (chapter 7).

In an interview, one co-ordinator elaborated by describing how support staff will work with an individual teacher to formulate a three- to five-year professional-development plan. Parts of the plan typically include opportunities for teachers to see other teachers teaching and a system whereby teachers record questions for their next discussion with support staff. An underlying belief is that the teacher is a decision maker.

Beyond the classroom, they work with principals for implementation and in providing in-service and sessions for parents. Co-ordinators may be involved in the activities noted above and, in addition, are expected to have an overview of the situation, monthly meetings among themselves to "keep track of things", and periodic reports to the curriculum committee.

The questionnaire from 17 support staff also yielded considerable data about their role in practice. When asked to list their most important responsibilities, four of the 15 who responded to that particular question indicated planning and conducting in-service activities, three said development of curriculum programs and materials, and two listed management responsibilities. A related finding is that the activities which take the most time of most consultants are responding to requests from individual teachers, and planning and assisting with the implementation of centrally initiated curriculum changes. It was also noted that teachers and principals, often in groups, were the major cients for most support staff. Eight of the respondents stated that most teachers and principals with whom they work were also involved with other support personnel, and 15 of the people said that personnel working in the same schools rarely communicated with one another. At least 60 per cent of the support staff said that they were providing a "moderate amount" or "a lot" of assistance securing materials and resources for the new curriculum, developing principal and teacher support for it, planning for or developing curriculum documents and/or materials, and arranging or providing initial training for users.

In summary, the role of central superintendents is seen to be in approving curriculum development at the Academic Council level, and area superintendents are considered to be responsible for monitoring principals. The principals are now viewed to have a central role in decision making about implementation, instead of simply receiving new programs. An important feature of the approach to implementation in the school system is that people at the school level normally decide when, and if, to implement. If the decision is positive, they negotiate with co-ordinators and consultants for support on a regular basis.

In the spring of 1983, there was a review of the Curriculum Department occasioned partly by the question of whether the system should have such a large curriculum staff. Information was gathered from all parts of the system about the role and value of the Curriculum Department, its consultative and professional development services, and comments on each of the subject areas. A large binder contains the qualitative results. The main messages seem to be that the Department and its consultative as well as professional-development services are very highly valued, consultants are overworked, and if anything the services should be expanded. The work of the Department was seen as more evident and more effective at the elementary than at the secondary levels. Results from a survey sheet confirmed that the work was much appreciated. Concerning Primary consultative services, for example, of 88 principals, teachers, and other respondents, 42 indicated that the services should be maintained, 2 said it should be decreased, and 44 said it should be expanded.

In general, one gets the impression that South Separate has an overall model which guides action and that the use of the model started informally and has been gradually and recently followed and elaborated more formally. Expectations are flexible with an emphasis on voluntarism. It also seems to be the case that the development stage is co-ordinated carefully, but that the much more complicated implementation stage is more varied and less co-ordinated, and that fewer technical-assistance documents (e.g., procedures for formulating school-level implementation plans) have been developed. One suspects that a number of implementation techniques are being used by individuals, but go undocumented. The Curriculum Department and its staff is seen as very good and overworked. The latter may be related partly to inefficiencies in the procedures, techniques, and co-ordination of the implementation stage across role and responsibilities. We will return to this issue in later chapters.

PART II

CROSS-CASE ANALYSIS

CHAPTER 6 FACTORS AFFECTING IMPLEMENTATION

In our interviews, we asked superintendents and consultants to describe what factors they thought were contributing to effective implementaton in their system, and those which they viewed as obstacles at that time. The findings for each board in turn are presented. We conclude the chapter by summarizing the main common findings. It will be noted that there is rather more detail presented relative to East County and Region North than that relative to West Public and South Separate. The reasons for this differ by board. For East County, the main reason for greater detail is that the system itself has developed a greater variety of specific curriculum procedures, and all superintendents and consultants are heavily involved in implementing them. Thus, there is greater common knowledge on which to draw and which can be articulated with reference to procedures. For Region North, the main reason is that the system is currently preoccupied with a major review of its curriculum processes. Much greater awareness and discussion have been generated, particularly with reference to obstacles. West Public is more straightforward in the sense that it is engaged in the normal progress of continuing to elaborate and develop its model. South Separate is least detailed because its model is less formally spelled out and system participants follow it in a more varied way, especially during the implementation stage.

We follow the same order of cases as in the chapters in Part I. The list of factors was derived from a content analysis of the interview data, supplemented by the questionnaire data collected from consultants. In one case - Region North - we benefitted from the findings of a Task Force that completed a major review of the curriculum process in the system while our study was in process.

I EAST COUNTY

In examining the interview transcriptions, we identified a number of themes, both positive and negative, that were mentioned by several respondents. We did not attempt to develop a list of specific subvariables within a cluster. Each of the themes was mentioned by many respondents, in most cases by a majority of the 15 superintendents and consultants interviewed. A list of these, positive and negative factors is contained in table 6.1.[8]

Respondents in East County were clear, consistent, and explicit about the factors they identified. There was a very high degree of consensus about both positive and negative factors and a high degree of knowledge and internalization of the East County Curriculum Model. Because respondents were so articulate about the workings of the model we present a number of quotes in relation to the nine positive and six negative factors. These quotes provide a much richer and more specific understanding of how the model works and how the combination of factors operates.

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[8] There is no attempt to rank order the list of factors in the tables in this section. Most factors were mentioned by several respondents. The text refers to the extent of mentions. Factors which appear across cases are sometimes stated using slightly different words. This is so because we tried to use the emphasis as stated in the particular case.

Table 6.1: Factors Contributing to and Inhibiting Implementation: East County

	Facilitators		Obstacles
1.	System commitment and preoccupation with curriculum	1.	Teacher capacity, overload
2.	Director's commitment	2.	Principals' lack of leadership
3.	Widely understood, sound, and practical procedures	3.	Financial resources
4.	Leadership at central level	4.	Additional demands
5.	Increased leadership by principals	5.	Complexity of the model
6.	Open climate, high expectations, high recognition	6.	Role of board and turnover
7.	Healthy curriculum budget		
8.	Selective use of external agencies		
9.	Persistence and cumulative development		

Facilitating Factors

To start with the positive factors, the following are illustrative quotes by category from table 6.1.

System commitment and preoccupation with curriculum

> "There is a tremendous commitment to curriculum delivery over the last six years in our system." (S)

> "You can't get promoted in this system unless you are a program leader. We have an area superintendent retiring, and the people rumored as contenders are all program leaders." (C)[9]

Director's commitment

> "The Director is seen by this system as being on top of curriculum. He sets the tone and this is very important." (S)
>
> "The Director emphasizes, and we agree, that the primary aim is instruction in the classroom. We try to fulfil that aim. It's a worthwhile purpose, but my God it's hard. This Director and the previous Director emphasized instruction as the raison d'être." (S)
>
> "The Director's attitude is reflected throughout the system. It's OK to start where you are. But start, choose an area you want to improve - and plan." (C)

Planning procedures and consistency

At one level, people referred to the effectiveness of the total model.

> "Recognition through administration and support services that there have to be ongoing processes." (S)
>
> "The framework is a strength because it leads to planning and steady monitoring of progress. It helps teachers and principals tie it all together. That's the major strength of West County. The consistency. The organized approach." (S)
>
> "The close coupling of curriculum development, evaluation, and support." (S)
>
> "The focus is on help, on assistance; we are clear that teachers need a period of low-risk practice. It's OK not to do something well at the beginning, but it's not OK not to progress to higher levels." (S)

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[9] The person eventually selected as area superintendent was the Co-ordinator of Curriculum Services.

> "Teachers and principals are more comfortable and feel helped, because the process we have now for curriculum implementation involves them from the beginning and then phases in change. It's more dynamic now. All sorts of feedback loops." (C)

> "As a result of the procedures, we have pretty good agreement by the time we reach the county level." (S)

At a more specific level, those interviewed stressed particular components like the program scale, principal's goal packages, quality of curriculum, the evaluation process, and the importance of the review stage.

> "The program scale is a good means of being explicit about goals, materials, methods, evaluation, and above all what you are going to do about it." (S)

> "The principal's goal package forces them to act." (S)

> "We have very sophisticated, very good curriculum documents and materials, excellent curriculum development." (S)

> "A key is the review cycle, as it really does make a difference - people listen very carefully about problems, and we develop strategies, materials, and in-service in responding to the reviews." (C)

Leadership at the central level

> "High level of skills in the development group and team approach between administration and curriculum services." (S)

> "One of the things about East County is that people are conceptually in tune with the ideal. I spend a lot of time talking with the Curriculum Services Co-ordinator to make sure I have the ideal perfectly assimilated. The beauty of it all is that all our co-ordinators and consultants sing the same song. They are conceptually consistent." (S)

> "Planning-orientation of co-ordinators. Putting pressure on and helping schools recognize the need for planning." (S)

> "The superintendents are really skilled in helping principals develop their plans. Our system has done a lot in helping administrators in curriculum management." (C)

Role of principals

(see also Obstacles to Implementation)

"More principals see instruction as a major component of their role." (S)

"The level of functioning of principal. The principal is a major factor. Three of the 11 principals I work with are great." (S)

Open climate, high expectations, and rewards

"An open climate where you can discuss, raise issues. A strong problem-solving capability - willingness to look at things. Expectations are clear and high, and there's stimulation and satisfaction." (S)

"One major revelation is that, if recognition and rewards are there, you get the performance. It feeds on itself." (S)

"Superintendents are open, sharing, and trusting. It is a nice atmosphere in which to work. Everybody gives credit where credit is due." (C)

"Another major factor is the incentives and rewards philosophy. There is an encouragement for teachers to work on curriculum-and-review teams, or to get and dialogue with people outside the system." (S)

"The chances of good work going unnoticed are very slight. We want people to know if they put out 100 per cent that they will get recognized. It is personal; it is planned. It has recognition and appreciation." (S)

Healthy curriculum budget

(see also Obstacles to Implementation)

"Healthy curriculum budget. $100 000 for supply teachers. More than other Boards." (S)

"We buy a lot of materials and develop many materials. Teachers don't have time to develop materials or to fight to get equipment." (C)

"Cost issues - if only one-shot efforts are made, the money goes down the drain. Therefore, put resources into a plan - part of our job is to sell this to the Board." (C)

> "The Board consistently supports the programs in terms of people and budget. They have not done the minimum. They have gone beyond the call of duty. There's a pride in what we are doing." (S)

In the survey, eight of the nine consultants "strongly agreed" or "agreed" with the statement that "the Board allocates the resources (money, staff, time) to carry out the school system's approach to curriculum implementation."

Use of external agencies

> "Lots of contact with Ministry, if I think they have something to use. We look for resources and for information - more at an administrative level. At the regional level they don't have the in-depth knowledge." (C)

> "The Ministry carries the main message. They have been a catalyst at the Secondary level with OSIS." (S)

> "We encourage the Ministry to come in and evaluate. We co-ordinate it centrally. We try to expand their terms of reference to add questions we want....We have learned to be up-front with the Ministry, and they are receptive, but they do not want to go as far as we are in being specific....We welcome partnership with the Ministry, but there seems to be a reluctance and a certain distance that they want to maintain." (S)

> "A great deal of contact with OISE in problem-solving skills. We go to them for the substance. Ken Leithwood (OISE central) and John Ross (OISE field centre) are important here." (C)

> "The M.Ed. class in one high school on complex skills is assisting. The principal promoted it and urged people to attend. These seven people taking the course are now leading a renaissance in the school." (C)

> "Ministry documents concerning complex skills are helping, as is the M.Ed. course that is being offered in Belleville. It is on complex skills and about 25 people are enrolled." (C)

> "Our contact with other boards is informal. Many come to us. It is a bit lopsided and there's lots of demands, but the Board supports us reaching out." (C)

Historical persistence and cumulative development
(see also Obstacles to Implementation)

> "We have recognized, I think, the need for the organizational conditions and the individual needs to be integrated. The stages we have gone through as a system, and with the leadership we have had, has contributed in a developmental way. There is a value-added development over the three Directors." (S)
>
> "We are always grooming future leaders - vice-principals for example." (S)
>
> "County expectations and stages - not everything expected at once. Most teachers at first wondered "why". They need skills, resources, management techniques. It was an enforced change - valuing came later." (S)
>
> "Developing the conceptual thinking underlying the approach. If it works for you, why does it work? Getting people to understand. There is a great stimulation in that some of our principals enjoy theoretical input. It is a result of accumulation - steady, patient, skill development, and they get more sophisticated in relating the theory to the practice." (S)

The questionnaire data again confirmed the findings about positive factors. Using the high standard of "strongly agree" on a four-point scale, 67 per cent strongly agreed that "this Board attaches a high priority to curriculum implementation", and 78 per cent that "the purpose and goals of the approach to curriculum implementation...are clear".

On the difficult task of effecting "co-ordinated interaction among senior officials, curriculum support staff, principals, and teachers", 22 per cent strongly agreed and the remaining 78 per cent "agreed". Co-ordination among support staff, through regular communication in planning and scheduling assistance in schools, was similarly high (five of eight (63 per cent) indicated that there was regular co-ordination compared to a high of 21 per cent in the other three cases).

We asked about the consultants' perception of whether "most", "some", "few", or "none" of several role groups were actively supportive and skilled in implementation. All but one (88 per cent) said that "most" central administrators were actively supportive, six of nine (67 per cent) said the same of area superintendents, while only two (22 per cent) said most school principals are knowledgeable about implementation, or committed to ongoing in-service for curriculum implementation. Using the more stringent criteria, none of the consultants indicated that most "principals are skilled in organizing and supporting curriculum implementation at the school level" (five of the nine indicated that "some" principals were skilled in this).

Obstacles to Implementation

The six categories of obstacles are similarly illustrated in the following quotes.

Teacher capacity, overload

> "Capability of teachers to keep on top and be knowledgeable about programs. We have some very sophisticated, very good documents. The more skilled teachers integrate the learning experience across the curriculum. It requires a conceptual skill to oversee the program. It is not mechanistic, even though we have it as a technology." (S)

> "Resistance to change in some teachers, despite the number of years we have been in the learning-outcomes process. Now the problem is more at the secondary level, because 'learning outcomes' has grown up in the elementary system." (S)

> "The program scale is fine except the skills are so damn complex - most teachers lack the background in skills-and-growth schemes." (C)

School leadership[10]

> "If you have a principal who doesn't place a high degree of importance on curriculum, that's a barrier. If there's not a strong feeling that it matters then you don't get the persistent effort. You don't get the monitoring that goes with planning." (S)

> "I would say 50 per cent of the principals are involved at a superficial level....The very active principals would be about 10 per cent who have negotiated a plan of identified resources. The rest are not involved." (C)

> "It is kind of threatening for a principal to realize that his staff is way ahead of him on some things - we need to support those principals with careful placement and professional development." (S)

> "A major problem at the secondary level is the role of the department head. He is not seen as a program leader." (S)

> "We have given principals good directions, but not in-depth training." (C)

> "Principals are curriculum managers and approximately 10 per cent fulfil that role. We are getting more professional development of principals. We have a program scale and a principal's profile. If we can get a handle on principal training and department-head training we will really get somewhere." (S)

It is difficult to draw conclusions about the role of principals, because the standards of those interviewed were very high. Our own approximate conclusion from the interviews is that about 10 per cent were functioning at a very high level (problem solving in Leithwood's terms), another 40-50 per cent at the program-management level striving to get better, and the remaining 40-50 per cent at less than management level, although many were clearly seen as developing towards higher levels.

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[10] There is reference in other sections to the principal's level of functioning or principal's profile. This is based on Leithwood and Montgomery's (1986) scheme which consists of four levels of effectiveness - administrator, humanitarian, program manager, and problem solver. The system has been using Leithwood's principal's profile recently.

Financial resources

> "Too few people to do too many things. There has been a cut in support staff." (S)
>
> "Lack of resources. We have relatively good financial support, but we need more resource people." (S)

Additional demands

> "External factors that we can't control. The separate-school-funding issue, OSIS, etc." (S)
>
> "The day-to-day problems that can't be avoided usurp things if you are not problem-focused....Co-ordination of curriculum is not the problem. Co-ordination of everything else is." (C)

Complexity of the model

> "It is viewed as a complex set of procedures - too complex. It is sometimes viewed as too theoretical. There is complexity as to how the parts relate to the whole....The major obstacle with some teachers is that they don't value it - they don't see it as helping them. It's too ambitious and there's too few resources. And the Board is saying there's too many resources." (S)
>
> "When I recognize what we would have to do to do all this properly, plus how we are ideally set up, plus how far we have come, but how far we have to go, I get discouraged." (C)

School Board

> "In the political area, trustee turnover, financial cuts, and having to re-educate new trustees." (S)

There is no need to repeat a summary of main factors because table 6.1 contains the overview. It can be noted that some of the factors appear in both lists, such as the role of principals and resources. These are not inconsistencies because the same people who were interviewed talked about the strengths and weaknesses of the system in reference to progress in the development of principals' roles and the pros and cons of the budget.

We will take up the implications of the East County model and associated factors at later points in the report.

II REGION NORTH

We drew on the 19 interviews, the survey data, and the system Task Force. Table 6.2 contains the overview of factors in the interviews perceived to be affecting implementation. The contributing factors were mentioned by several respondents each, but with not nearly the frequency found in East County. There was much greater elaboration and consensus about the obstacles. All 10 obstacles were mentioned by a majority of those interviewed, and all 10 were contained in the Task Force's review.

As with East County, we will elaborate on the meaning of the themes starting with the contributing factors.

Factors Contributing to Implementation

Five superintendents and five consultants commented specifically on factors facilitating curriculum implementation in the system. Others spoke about contributing factors in the context of other questions.

Table 6.2 Factors Contributing to and Inhibiting Implementation: Region North

Facilitators	Obstacles
1. Consultant services	1. Unclear expectations
2. Leadership of Director and other central administrators	2. Lack of in-school expertise for curriculum
3. Curriculum-development process	3. Overload at school level
4. Principal's leadership	4. Teacher frustration
5. Current system focus on implementation	5. Insufficient leadership in schools
6. Specific Board priorities	6. Inattention to implementation in the classroom
7. Financial resources	7. Insufficient in-service
8. Supervisory process	8. Unsystematic review of implementation
9. Expanding enrolment	9. Lack of co-ordination across organizational units
	10. Lack of consensus on solutions

Half the superintendents and consultants who were interviewed said that Board consultants were making a positive contribution to implementation in the schools through their professional assistance to teachers and principals. According to one consultant, "the consultant group's main strength is its support and response to individual teachers and groups of teachers' requests, because teacher requests can bring to light needs that you hadn't thought of before on your own."

Half the superintendents and several consultants mentioned the positive influence of a few senior administrators on curriculum implementation in the system. The superintendents consistently pointed to leadership from the Curriculum Superintendent at the system and school levels. The Director is seen as supportive of the increased emphasis on implementation. Consultants reported that some central and area superintendents have gained a better understanding of, and become more involved with, the process of curriculum implementation in the last few years. A couple talked of a general receptivity within the administration to new ideas. In the survey, consultants estimated the scope of active support for implementation among system officials. Overall, they view central administrators to be more actively supportive of implementation than area superintendents.

About half the consultants and a couple of superintendents had positive things to say about the structure and process for curriculum development in the system. All indicated that the Curriculum Councils and Task Forces served as a good training ground in curriculum development for the teachers who participate. Two superintendents said that Task Forces were producing better-quality curriculum documents than in the past.

A few superintendents and consultants reported that principals are contributing more effectively to curriculum change in the system now than in the past. Several superintendents talked about system efforts to make curriculum leadership a major criterion of effective performance, and to provide in-service support for this role. One said that principals have been generally receptive to the curriculum-leadership emphasis. The consultants confirmed this impression. One superintendent estimated that half the current principals are performing acceptably in this regard. One consultant guessed that about 4 per cent were "right on line", but "many are trying". Three listed the fact that curriculum experience and interest are now key criteria for selecting principals and vice-principals and that this represents an important contribution to implementation in the system. In the survey, consultants indicated that principals were knowledgeable about implementation and supported teachers in implementing curriculum changes, but almost two-thirds of the consultants (62 per cent) indicated that "few principals are skilled in organizing and supporting implementation."

The superintendents, in particular, reported a greater "overall awareness and encouragement in the system for implementation" than in the past. This is evident not just in the actions of the Board. Additional indicators of the current emphasis on implementation that have been mentioned, include public support from the Director of Education, more attention to implementation and to professional development by Supervisory Officers, clearer administrative expectations for change, and more administrative latitude for risk-taking and incremental change on the part of those involved in implementation. In the words of one superintendent, "Now we are paying attention to implementation. Before we emphasized development. It got out of focus." In the survey, 66 per cent of the consultants "agreed" or "strongly agreed" that the Board attaches a high priority to curriculum implementation.

Several superintendents talked about the Board's present willingness to commit extra money for professional development and material resources to support implementation in process. They also spoke of the facilitating effect of the Board decisions in recent years to adopt multiyear priorities for implementation of certain projects. According to one superintendent, this "has the effect of focusing attention for two or three years across the system". Two mentioned the carry-over influence of the FL/SE and Language-Development projects on approaches to implementing other changes in curriculum and instruction in the system. One consultant said the commitment of resources to Board curriculum priorities has led teachers in her area of program to seek a higher profile and more resources for their own implementation efforts. In the survey, however, only 17 per cent of the consultants agreed that the Board allocates sufficient resources for implementation.

The program and staff-supervisory processes were described as contributing to implementation by one superintendent and one consultant. The consultant referred specifically to a "trend away from the evaluation of products to process". Another consultant said the supervisory process is designed to be helpful, but that its effectiveness is hampered by teachers' suspicions of the underlying administrative intent.

The fact that the student population in the school system is growing contributes indirectly in a number of ways to the effectiveness of curriculum change, as suggested in these quotes from two superintendents.

> "The presence of many new teachers who are new to the system also benefits implementation. The changeover is a really stimulating experience."
>
> "There is a fair amount of mobility in this Region...which allows transfer of teachers with particular expertise to other schools. That helps break down inertia to change."
>
> "Growth...is a blessing regarding new blood. Job security. The system is still growing rapidly. Quite a large number of appointments at principal, vice-principal, and supervisory levels will be made. There has been a built-in dynamic to the system that should be very positive. We are getting parents that are well educated and have high expectations. Children are bright and aware. All this keeps the system alive."

Obstacles to Implementation

Our data on current obstacles to implementation in the Board derive from our interviews, and an interim report from the Administrative Council's Curriculum Task Force set up in the fall of 1984 to review the established curriculum process and make recommendations. In this report, the Task Force expressed its own view on the process, and provided a summary of problems identified in 93 briefs submitted by staff from all levels of the system.[11] We have attempted to triangulate these data so as to convey the sense in which particular barriers to implementation are confirmed by different sources.

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[11] The draft of the case study was finished before the final report was seen. Recommendations from the Task Force's final report are contained in chapter 8.

Our discussion of obstacles to effective implementation is organized into 10 dominant themes or categories of problems, ordered more or less in relation to their position in the curriculum-development and implementation process.

In discussing specific obstacles to implementation associated with each theme we describe problems identified in the Task Force report first. Then we draw on our interview data to confirm, illustrate, and/or expand upon the Task Force findings. It is important to note some reservations we have about the Task Force report. First, the report focuses almost entirely on problems with the current approach to curriculum development, implementation, and review. Apart from our interviews, we do not have an equivalent in-house commentary on positive aspects of the process. Second, the Task Force's own views are given equal footing, in the report, with the findings from staff briefs. For example, the summary of staff briefs had little to say about inadequate implementation planning and co-ordination, though these are highlighted in the Task Force's analysis and conclusions. And third, it is evident from our knowledge of the overall situation that many of the criticisms reflected in the staff briefs relate less to what is going on at present in the Board than to past experiences, particularly at the elementary level, which have led to the current review. We did not ask specifically about difficulties associated with the Board priority approach.

1. Unclear Expectations for Implementation

The Task Force reported that "many of the staff briefs maintained that the Regional Guidelines are of only limited value." Specific criticisms focused mainly on the clarity and practicality of these documents. Similar views were expressed by four consultants and one superintendent. Teachers in the Region often refer to guidelines from neighbouring school boards for more specific suggestions and sample units. Some superintendents (three), however, thought Region curriculum documents had become more clear and specific over the years.

The Task Force identified problems in the initiation of implementation in the schools arising from the lack of direction in Region curriculum documents. Several staff briefs maintained that "documents arrive at the school with no specific directions for implementation (e.g., no timeline)", and "without a clear indication of what is expected of staff or individual teachers". One area school superintendent expressed a similar view. In the consultants' survey, half the respondents judged the goals and the roles for curriculum implementation in the Board as unclear.

Some superintendents (three) and consultants (four) referred to the difficulty school staff have had understanding curriculum-writing requirements of guideline implementation.

> "Teachers have misunderstood 'developing a course of study' with developing unit plans and lesson plans." (S)
>
> "What in fact happened as a result of the process and perhaps because of poor communication and lack of understanding, is that we focused on the guides. We wrote Board guidelines this thick. There was a misperception that school guidelines had to be even thicker." (C)

In light of previously mentioned memoranda from the Director clarifying curriculum-writing expectations, the reputed lack of clarity may be based more on lingering memories of hard times past than on the current situation. According to consultants, misunderstanding among school staff about implementation expectations is not just caused by unclear guidelines and plans. One said different expectations were hitting teachers from different sources.

> "Another obstacle would be the lack of communication of different departments at the Board level, so there are conflicting messages being sent out to teachers....The teacher doesn't differentiate the sources. Sometimes the messages are contradictory, and teachers don't know what to do. There is no clarity in the minds of teachers."

Three consultants said that approaches to curriculum implementation which grant decision-making autonomy to line administrators and teachers, encourage the misinterpretation of system expectations as they are communicated down the line.

In summary, the problem of unclear expectations appears to result partly from lack of specification and direction in curriculum documents and partly from effects of the decentralized organizational approach to implementation. The official who reviewed the draft case study called our attention to the paradox that staff criticisms of the utility of Region guidelines are, in fact, criticisms of the work of fellow teachers, not central office personnel.

2. Lack of In-school Curriculum-Development Expertise

According to the Task Force, "the large majority of staff submitting briefs maintained that the in-school writing of curriculum required by the present procedure is not feasible." One of the specific problems identified was "a lack of in-school expertise to accomplish the task". This problem was also reported in our interviews with several superintendents (three) and consultants (three). The Task Force and some of our respondents (three) attributed the problem to an erroneous assumption that most teachers in the schools have curriculum-development expertise, and that involving teachers in writing their own curricula results in effective courses of study. A corollary to the problem identified by the Task Force and several superintendents is that the teachers who do have a good understanding of curriculum development are not evenly distributed across the schools. This creates unequal demands on staff, especially in small schools.

3. Implementation Overload

Several staff briefs to the Curriculum Task Force and about half of the superintendents interviewed said that the delivery of Region curriculum initiatives is uncoordinated, and that "too many regional documents arrive at the school in too short a span of time."

The majority of staff briefs to the Task Force maintained that there is "not enough time to complete the (curriculum writing) task and/or too many expectations for the time available". This opinion was confirmed by some area school superintendents (two) and consultants (three).

A few superintendents and consultants said that the perception of overload was partly due to teachers misunderstanding the requirements for writing courses of study. Others attributed it to the reinterpretation of system expectations by line administrators.

> "Another obstacle to implementation is the difference between intent and delivery by the time it gets down to teachers....Things may have been planned for gradual or natural implementation, but it gets down as something that has to be done next week....The pace or weight of implementation expectations changes." (C)

In summary, the problem of implementation overload seems to be the result of the interaction of multiple factors - no control over the number of central initiatives, lack of school time to do the work of curriculum-writing and implementation-support activities, competing priorities and demands on teacher time, misunderstood expectations for implementation, unrealistic timelines, and the previously mentioned lack of in-school curriculum expertise. According to some superintendents (four), a consultant, and a majority of staff briefs to the Task Force, the overload problem could be alleviated by reducing the duplication of effort that results as each school "reinvents the wheel" in the traditional curriculum process.

4. Teacher Frustration and Commitment to Implementation

Teacher dissatisfaction with the curriculum process is said to hinder their commitment to implementation. The Task Force argued that it was a false assumption that teacher participation in developing their own curriculum creates commitment to implementation. Comments from superintendents (two) and consultants (six) seemed to confirm this view.

The Task Force suggested that participation creates commitment when it is voluntary, not when required, and that there were insufficient "extrinsic rewards" for involvement in the present procedure.

5. In-school Leadership and Support

Several staff briefs to the Task Force claimed that "in-school leadership is not always provided to ensure that implementation begins and continues." A majority of the consultants (four) agreed. Superintendents (two) cited the lack of curriculum-leadership knowledge and skills on the part of some principals and the low priority given to implementation by others. As reported earlier, recent improvements in the leadership of principals are seen as a factor contributing to implementation.

6. Inattention to Implementation in the Classroom

Half the superintendents (five) and most of the consultants (six) talked about a characteristic inattention to classroom level implementation. A few staff briefs to the Curriculum Task Force agreed that "implementation activities require a stronger emphasis." Our data suggest a number of reasons for this inattention to implementation in the classroom. One is that "curriculum implementation" has traditionally been interpreted as equivalent to execution of the school curriculum-writing task. Another is the past assumption that changes in classroom practice follow naturally from the production of written curriculum plans.

According to some Task Force briefs, the in-school "developmental activities...and other system expectations.... consume too much teacher time with too little time remaining for implementation activities." Several superintendents (four) and consultants (four) corroborated this view.

7. Insufficient In-service and Resource Support

On the whole, the superintendents were more complimentary than critical of the quantity and quality of in-service support for implementation. Many briefs to the Curriculum Task Force, however, maintained that additional and more appropriate in-service training is needed for the effective implementation of curriculum guidelines. According to consultants (four) and a couple of superintendents, the level of in-service assistance is weakest at the beginning of implementation in the schools.

> "Usually copies go out to schools, though sometimes Task Forces go out and attempt to deliver the document and to talk to principals about it. Then it dies in the water." (C)

> "There is no real training, not as I see training. There is introduction and there is discussion, but I don't see training." (C)

> "We are getting better, but we need to do more in the whole professional-development area. I'm thinking about the business of being more systematic about what we do when we introduce a new course, as far as identifying teacher needs and getting the resources to them." (S)

As reflected in the Task Force report and in our interviews, it is not just a matter of increasing the quantity of professional-development support. The Task Force and a majority of the consultants (four) interviewed said that there were not enough resource personnel to service current teacher needs. Moreover, "the time available for in-service is often consumed by other initiatives," such as the Board's Language-Development priority. The willingness of teachers also comes into play, because workshop participation is usually voluntary. Invitational workshops tend to attract "the converted". Most consultant workshops are held after school, when teachers are least likely to want to come. Many teachers, especially at the secondary level, are reluctant to use or don't see the need for consultant services. The Task Force concluded that "in-service activities associated with delivery and implementation should be compulsory and held during school time."

A few briefs to the Curriculum Task Force maintained that material "resources are not always available as needed for effective implementation of curriculum." Financial constraints on budgets for equipment and materials and supply teacher time for professional development were mentioned by three superintendents and two consultants. One superintendent spoke of the difficulty in keeping up with the pressure of expanding enrolment on special facilities like libraries and labs. Most superintendents commended the Board's current willingness to commit resources to implementation.

8. Unsystematic Review of Implementation

Several of the superintendents (four) interviewed cited weaknesses in the system for reviewing program implementation: inadequate monitoring of teacher needs; lack of Regional focus in external evaluations; inconsistent follow-up of evaluation recommendations. Three consultants and one superintendent said the value of the supervisory process was diminished by teacher suspicions about administrative intent. The Curriculum Task Force criticized the absence of standard practical procedures for guideline revision and the inexplicit distinction between program review and staff supervision. All sources maintained that ASHR program evaluations were not well co-ordinated with the rest of the curriculum process.

9. Lack of Co-ordination Across Organizational Units

The Curriculum Task Force was critical of the loose organizational ties between professional development, program evaluation, and curriculum implementation. This was equivalent to concerns expressed by a majority of superintendents (six) about poor co-ordination between the Operations, Planning, and Development and Human Resources divisions. One suggested that problems in co-ordination stem from a lack of consensus on system goals. A few superintendents talked about low co-ordination among consultants and in the way ASHR school-program evaluations are organized.

A majority of the consultants interviewed (four) agreed that there was little co-ordination and cohesion within the consultant group. Lack of formal co-ordination and communication between consultants and the ASHRs was listed as an obstacle to effective implementation by two. Others (two) talked about inadequate communication with area superintendents.

Comments about the absence of intraorganizational co-ordination left the impression that while everybody is working on change, few are working on the same thing. This image is consistent with the view, in the literature on organization theory, of education organizations as loosely coupled systems. It appears that many parties in Region North find the degree of autonomy among organizational units there to be excessive.

10. Lack of Consensus on Solutions

Over half of the superintendents and all the consultants interviewed indicated that there are differences of opinion within the administration and the system-at-large on what kind of curriculum the system should develop, what role consultants and teachers should have in its production, and how initiation of implementation in the schools should be organized.

At issue for curriculum development is whether or not courses of study should continue to be developed by each school. This approach is now out of favour with many staff members. They talk instead of the need for centralized development of standard courses of study.

The second issue is whether or not the development of curriculum in the system should continue to be carried out by classroom teachers. Many school-system personnel believe that curriculum writing should be a responsibility of Board consultants, as it is in many Ontario school boards. Others hold on to the traditional view in the Region that consultants should function as professional-development specialists, not as curriculum writers.

The third area of disagreement was only highlighted by one consultant, but is consistent with the varied approaches to initiating implementation in the schools described elsewhere in this report.

> "One view is the osmosis model. The idea is that a document goes out to schools and professional teachers will pick it up and work on it; and even if they don't, the Task Force members now know it so well that they will be little seed crystals out there that will transmit the change to the whole system. So one version of delivery is 'hands off', because these things take time. The other view is equally murky. It's hard to give language to it. It sort of has a good understanding about what can be done for curriculum implementation, but it doesn't really address the delivery process....There is a third view. That view is 'damn the torpedoes and full speed ahead'. Send out papers for teachers to fill out and make people do it. That's the language development thing." (C)

The current state of indecision on these matters is itself regarded by many as an obstacle to effective curriculum change.

We turn later to a discussion of the implications of these findings. Suffice it to say that the Board is in the midst of placing all major problem areas on the table for analysis and consideration of revision of its model.

III WEST PUBLIC

The list of contributory and inhibiting factors derived from the 19 superintendent and consultant interviews is contained in table 6.3.

Representative quotations from interviews for each factor that is mentioned more than once are presented below. The source is indicated with "S" for superintendent, "Sv" for supervisor, and "C" for consultant.

Facilitators

> "Until the Director came along, we muddled. If we have any sharper focus on curriculum and the concerns of teachers, it is because of him. This is an example of the very important role played by one individual." (Sv)

> "I have had tremendous support from the Superintendent of Curriculum for any reasonable, thought-out plan." (Sv)

> "The external consultant on our committee that developed the Model was outstanding. He listened carefully and was open and helpful. He set up courses for us to attend." (S)

> "There is always money for releasing teachers and principals who are involved in pilots for in-service sessions." (C)

> "I told teachers that if there were any teaching materials they needed I would get them by hook or by crook. Demand it and you will get it if you need it - push for it. Be active." (C)

> "One principal in my area is outstanding in human-relations skills and in helping people to move from one level to the next." (S)

> "OSIS has created a positive pressure for the development of curriculum documents and the provision of in-service." (S)

Obstacles

> "Teachers have a right to in-service on school time or some compromise, even though it represents enormous costs." (C)

> "Yes, the Model is perceived as very complex, yet very few in the system need to know the whole Model." (S)

> "The LOU charts are seen as a tool for evaluation instead of for growth. Teachers freeze. They don't like it." (C)

> "The Model asks people to take giant leaps on things they have never done. It requires a lot of energy to do what is asked, without real pay-off. The cost benefit is not there." (Sv)

> "Consultants tried to meet as a group but we were told we shouldn't meet. We weren't a power group - it was the furthest thing from our minds. Now we have a consultant group and a staff association group...everything has to be so formal." (C)

> "Teachers say that we are always sending them stuff and they haven't time to assimilate what they've got." (C)
>
> "In 1983-84, out of 77 teachers, I worked with seven who were suffering from burnout or depression." (Sv)
>
> "A lot is done on teacher time. There is a problem in getting people out to after-school and evening meetings - 30 per cent won't go on their own time." (C)
>
> "There is a small group of resistors, perhaps 10 per cent, who give nodding approval but don't change classroom prctice." (C)
>
> "Jargon plays a large part in building resistance. Teachers want to be told just 'plain and simple' what to do and how to do it." (Sv)

Table 6.3 Factors Contributing to and Inhibiting Implementation: West Public

Facilitators	Obstacles
1. The Director	1. Overload
2. Superintendent of Curriculum	2. Superintendents can avoid
3. Increased awareness at Academic Council	3. Complexity of the model and procedures
4. Support and reputation of central consultants	4. Communication problems
5. Good materials	5. Cost-benefit not apparent
6. Leadership by some principals	6. Time for in-service sessions lacking
7. Ministry documents	7. Budget

Table 6.3 summarizes the factors. The most prominent system factor was the Director who was considered to be a strong, positive influence by six of the eight superintendents. One claimed that the pressure for a focus on curriculum was from the Director and not from the Board nor community. He was described as an "idea man" and as open and modern. According to one superintendent, when

the Director arrived in the system he said that many things were going on but "you have no documents." The Director was mentioned in positive terms by two of the four supervisors. The Director was listed by only one consultant as a facilitating factor. Other than the Director, the Superintendent of Curriculum was mentioned as facilitative by two superintendents.

Some superintendents mentioned central office consultants as important. In our interviews with consultants, we found some specific examples of implementation techniques which were apparently not well-known across the system. One consultant, for example, had a simple but powerful one-page checklist that he used with principals and teachers to determine how much explicit attention was being given at the school level to implementation. Principals were asked such questions as: Do you have a copy of X curriculum (in your office, in the library, does each teacher have one)? What other learning materials in support of X curriculum are available? How much time is spent teaching X each day by your teachers? Does your school have particular in-service needs re X curriculum? - and so on. Teachers were asked similar questions, as well as additional specific ones. This technique was an example of possible "hidden" ideas that often go unnoticed and are not disseminated to the rest of the system or beyond.

Area superintendents were usually seen as a group by other central office personnel, although one supervisor said, "Some superintendents are paper shufflers and some do team-building. There are a lot of ways they can avoid doing this." On the other hand, one person stated that senior administrators were doing a lot, and another claimed that she got tremendous support as long as she did her homework. Increased awareness of, and sensitivity to, curriculum processes and procedures at the Academic Council were also noted.

The overall complexity of the Model, especially in relation to levels of use, was considered to be a problem by a majority of those interviewed. Three people used the term "complex" and others referred to lack of clarity, misunderstanding of levels of use, and the need to avoid jargon. Tradition was recognized as an obstacle to the introduction of the Model document; this idea surfaced several times in interviews. One consultant expressed the opinion that some teachers felt that if they waited long enough the Model would go away, as had other developments in the past. This view was countered by one of the superintendents who said that people were beginning to realize that the Model was "there to stay and that it was time to take it seriously."

Overload was mentioned frequently. Four superintendents shared the view that too much was happening too quickly and that teachers and principals were "swamped". All supervisors and six consultants offered similar opinions with such comments as "lack of time is the number one complaint of teachers" and that teachers say, "you're always sending us stuff, and we haven't time to assimilate what we've got." With reference to teachers, one supervisor stated, "They sometimes think we don't understand them...that we don't care....It's my greatest concern." Another pointed out that the number of changes was a factor, as new programs had been launched recently in French Immersion, computer literacy, English, writing folders, and the Model itself had been added to other tasks. One superintendent exclaimed that the new ministry secondary-school policy document was "knocking the hell out of us".

Communication problems between central office personnel and teachers and principals were viewed as serious by three supervisors and two consultants. Others stressed the need to avoid jargon when reviewing documents. The need to provide school time for writing teams and for in-service sessions, and the related costs, was pointed out by six of those interviewed. Another supervisor expressed concern about burnout among teachers, and two others were frustrated by reticent teachers who would not attend evening meetings.

Further insight into factors affecting the implementation of the Model in West Public can be gained from the questionnaires answered by 15 of the support staff. At least 12 of the 15 report "useful" or "very useful" contacts with area superintendents, classroom teachers, resource teachers and librarians, principals and vice-principals, the Superintendent of Curriculum and Special Services, and other support staff. The most frequent contacts on a daily or weekly basis are with classroom teachers and other support staff. The least useful, and also least frequent, interactions are with colleagues from other boards, Ministry officials, and university faculty. A second factor is that at least 11 of the support staff agree, or strongly agree, that the goals of the Model are clear, the Board attaches a high priority to curriculum implementation, roles are well-defined, and specific responsibilities are clear. They believe that "most" central administrators in the system actively support curriculum implementation, and three others think "some" do. Support from area superintendents is not seen as favourable. The greatest variance is in response to a question about the supply of resources (money, staff, and time) to carry out implementation. Three "strongly disagree" that resources are sufficient, two "strongly agree", and others fall between those views.

Co-ordinators and consultants, according to the findings of the questionnaire, perceive principals more favourably regarding their knowledge about implementation than they do for their skills in organizing and supporting implementation. Yet principals are seen as generally supportive of teachers, while at the same time exerting some pressure on them. Regarding the commitment of principals to ongoing teacher in-service sessions for implementation, three place "most" principals in this category, eight say "some", and three indicate "few".

It should be noted that the Board sets system priorities annually, but the Model does not include a process for teachers and the principal to set priorities for a particular school. The steps in the Model for making a school plan include "reach agreement on a school-based timeline that will fit within the time schedule provided by the Implementation Team." It appears that many people in schools feel that they have to do everything at once and so feel overloaded. Some area superintendents, on the other hand, commented that they assist principals in setting priorities for the school, but that process is not explicit in the Model. With the exception of the perceived complexity of the Model, factors are related to personnel or characteristics of the system rather than to attributes of the Model.

IV South Separate

Representative quotations from the 15 interviews, for each factor mentioned more than once, are reported below. The source is indicated with "S" for superintendents and "C" for co-ordinators and consultants. The factors are grouped as being facilitative or representing an obstacle.

Facilitators

> "The principal lays out initial strategies, and we review it. Then he tells me what he is going to do next. There are three follow-up visits on my part." (S)
>
> "I meet informally once a month with co-ordinators. We share program information from co-ordinators to area superintendents." (S)
>
> "The best in-service is when it is done in the schools, not one-shot workshops. We have tried by pulling people out of school and sending them to a series of days, or single days, but this is not successful." (S)
>
> "There is support from the bosses. They encourage me to try my ideas or help me to get to workshops. I am welcomed in many schools - so long as you can help teachers, they welcome us." (C)
>
> "We will set up committees to write curriculum beginning at Grade 9. The timing is terrific because of OSIS and the curriculum guidelines." (C)

Obstacles

> "Time is always the big problem...the key is to set priorities. There are so many bloody guidelines. There are even guidelines for teacher evaluation." (S)
>
> "The higher up you go in the system, the worse the teaching. However, in the secondary schools I can see some important thing happening. There is integration of special education. More elementary teachers are teaching in high schools." (S)
>
> "We have more and more single-parent families. There is lack of support from parents these days that was not there in the past. Parents lie for their kids now. These are social problems." (C)

> "I have had very little contact with other consultants. We have staff-development days for our curriculum department, but I have felt a little left-out at those sessions." (C)

Table 6.4 Factors Contributing to and Inhibiting Implementation: South Separate

Facilitators	Obstacles
1. Administrative support	1. Overload - too many changes
2. Support staff, school in-service	2. Planning needs more direction and follow-up
3. Professional development a priority	3. Lack of sharing among co-ordinators
4. Excellent documents	4. Professional development separate from curriculum
5. Teachers better qualified and motivated	5. Principals' lack of leadership skills
6. Principals' leadership	

To summarize, the most frequently mentioned positive factors revolved around the provision of support in terms of classroom visitations to see programs in action, school-level in-service, and meetings of support staff. Also stated as positive factors were administrative support from superintendents, including priority in the system for professional development. Principals were seen as either very helpful or as presenting difficulties, presumably related to whether or not they were providing planning and instructional leadership.

The most frequently mentioned barrier was overload - too many changes being attempted at one time, with consequent frustration and lack of commitment. The DIME model itself drew very little explicit attention. The difficulty of integrating professional development and curriculum in-service was mentioned by two people.

The completed questionnaires from 17 of the support staff of the South Separate system enable us to gain more insight into factors affecting the implementation of curriculum. At least 12 of the 17 report "useful" or "very useful" contacts with classroom teachers, support staff from other school systems, support staff from South Separate, principals and vice-principals, department heads, and Ministry officials. Contact with people from outside the system and with department heads is said to be much less frequent than with other groups. The least-useful contacts are thought to be with university faculty and with area superintendents - these are also infrequent. A second factor is that at least 12 of the co-ordinators and consultants believe that the Board attaches high priority to implementation, that the Model results in co-ordinated interaction vertically in the system, that their own responsibilities are clear, that the Board allocates the necessary resources (money, staff, time), and that officials and staff have the knowledge and skills to carry out implementation, although four disagree with the last point. When asked if central administrators actively support implementation, six replied "most", nine stated "some", and two said "few". Feelings were similar regarding support from area superintendents. As in other cases being studied, support staff view the principals' knowledge about implementation more favourably than they do their skills for organizing and supporting implementation. Principals, however, are considered to be generally supportive, while, at the same time, they are exerting somewhat less pressure on teachers. Co-ordinators and consultants vary in their opinions of whether principals are committed to ongoing teacher in-service training for implementation, with two saying "most', eight indicating "some", and three responding "a few".

In summary, it is clear that while some factors, such as administrative support, are generally seen to be facilitating, there is considerable variation in perceptions and not all administrators are viewed so positively. Similarly, while lack of sharing among co-ordinators is listed as an obstacle, most of the support staff themselves consider it to be both useful and relatively frequent.

V SUMMARY

We will save an extended discussion for chapter 9. To summarize briefly, there are some patterns across the cases. On the facilitating side:

- System emphasis on curriculum
- High value of Curriculum Process by the Director (three of the four)
- Superintendents' leadership (central and area)
- Curriculum-Consultant effectiveness
- Financial resources
- Good curriculum documents
- Principal leadership

Note, however, that in only one system - County East - were curricular procedures and techniques touted.

The common obstacles identified were:

- Complexity of the models/lack of co-ordination
- Overload, especially at school level
- Insufficient and ineffective in-service
- Lack of sharing and co-ordination among consultants
- Financial resources
- Inadequate curricular leadership by principals

We leave further comparative statements until chapter 9.

CHAPTER 7 INNOVATION AT THE SCHOOL LEVEL

As part of the larger study design, we selected one curriculum that had gone through all or most of the cycle, so that we could examine a specific curriculum change in action. This had two advantages. First, it enabled us to examine the curriculum process on a mini-case basis in order to gain further confirmation and insights into how the process worked in each system. Second, it gave us the opportunity to obtain the views of principals and teachers about the system's approach to curriculum and their experience at the school level. The details of the sample are contained in each case section. In general, we selected four schools in each board and interviewed the principal and two teachers at the appropriate grade levels in each school, and the specific curriculum consultant and/or area superintendent. The four innovations examined were Environmental Studies - Grades 3/4 (East County), Family Life/Sex Education (Region North), Environmental Studies - K-3 (West Public), and Language Immersion (South Separate).

Each mini-case is presented in full, starting again with East County.

I EAST COUNTY

We selected Environmental Studies (ES) because it was a major innovation in the system over the past five years. We examined basic documents on Environmental Studies, including a county-wide program-evaluation review report released in the spring of 1983 and an updated review subreport in the spring of 1985. We also selected four schools within one superintendent's area of jurisdiction and conducted innovation-focused interviews with 14 people: the area superintendent, the social studies (environmental studies) co-ordinator, the four school principals, and two teachers from each school teaching at, and adjacent to, Grade 3-4 levels. The area selected was in the southern part of the county and was one which had a tradition of program-oriented area superintendents (the current superintendent had been in the area only a little over one year). There are eight elementary schools in the area, of which four were selected randomly. In total, then, we have county-wide data from two reviews and data from one of the four geographical areas (recall that there are two ASGs (Associated School Groups) in each area).

We present first a brief description of the nature of the Environmental Studies program, the timeline, and stages of introduction. The second section - implementation and impact - starts with a short summary of the review findings from the reports in the Spring of 1983 and of 1985, proceeds with an analysis of the process of implementation and key roles within it (teachers, principals, curriculum consultants, superintendents), and concludes with an assessment of impact.

A. Program Description: Environmental Studies

Environmental Studies is identified as one of the three major areas of study in the Ontario Ministry's Primary-Junior curriculum (the other two are communications - language arts and math, and arts). As such, it is a Kindergarten to Grade 6 program. As stated in the Board documents:

> "Environmental Studies focuses on the environment of the child with the intention of developing an understanding of the dependencies and interdependencies that exist in the child's environment." (Grade 3 Environmental Studies, County East, 1983)

The curriculum moves from the environment of the family, which is most familiar to the child, to those environments which are less familiar. Specifically, the focus by grade level moves from Me (Kindergarten), to Me/My Family (Gr. 1), Me/My School (Gr.2), Me/My community (Gr.3), Me/My Province (Gr. 4), Me/My Canada (Gr. 5) to Me/My World (Gr. 6). Each document, by grade level, is organized in a common format. There are eight or nine major themes to be addressed by grade level. Each theme is presented in three parts: (1) rationale, knowledge outcomes; (2) implications/strategies and measurement; and (3) teacher resource sheets. The themes, for example, in the Grade 3 curriculum are: interdependencies in the local community, decision making in the community, community origins and changes, animals in the local community, plants and the local environment, interdependencies in the local natural environment, the human body and its environment, and being a Canadian. The program is based on knowledge, skill, and values outcomes. There is a strong emphasis on inquiry, decison making, and other complex-skills development. ES, as indicated above, is expected to be one-third of the elementary program either as a stand-alone part of the curriculum, or more ideally as integrated with other parts of the curriculum.

While grade levels were added in sequence as County programs over a two-year period, the approximate timeline with some overlap across years has been

1979-80 - Field development
1980-81 - Field testing
1982-84 - County program
1983, 1985 - Reviews

The Grades 3 and 4 programs, which we examined, were released as County programs respectively in January 1983 and September 1983.

B. Implementation

ES Reviews 1983/1985

A useful context, before delving into the details of the nature of implementation and school-level processes, would be found in the results of the ES reviews conducted in the spring of 1983 and 1985 by the curriculum co-ordinator. In 1983, Kindergarten to Grade 3 was at the County stage and Grades 4 to 6 at the "well-developed Field Test stage". A random, stratified sample of 100 teachers was selected and interviewed. The interviewers were trained; these included curriculum consultants and volunteer principals. Among other matters, teachers were assessed on the Program Scale (a scale measuring levels of implementation ranging from 0 (awareness) to 5 (full integration)); a score of 3.2 or below is considered unacceptably low. The findings in summary were:

- implementation in 30 per cent of the teachers' programs was found to be excellent (scores above 3.2);

- implementation in 33 per cent of the programs has been virtually ignored (scores 2.3 and less);
- time-allotment to ES varied greatly in classrooms, from 30 minutes to 600 minutes per week.

Some of the explanations were that "many of the non-implementers do not understand or value the Environment Studies program and they have not received much support from their principals." One of the eight ASGs had quite low implementation, implying that the superintendent and principals were not taking appropriate actions. In the situations of high-level implementation, teachers reported that it was the result of several factors:

> "Superintendents' insistence on complex skills, principals' insistence that the program be covered, and follow-up assistance, attendance at workshops, work on subject councils, help from support personnel, and on-going interest in complex skills within the staff."

Three main recommendations were made: (1) that Administrative Council receive further orientation to the program and how to monitor it; (2) that the Council discuss in-service training for principals in the areas of (a) the ES program, (b) curriculum management procedures in the school, and (c) expectations and procedures for supervision of County programs; and (3) that Curriculum Services provide differential support and in-service training according to different levels of implementation needs.

A follow-up review was conducted in the spring of 1985. Interviews were carried out with 28 teachers randomly selected within stratified groups. Completed questionnaires were collected from 85 teachers and from 17 principals. The findings from the interviews in brief were:

- 40 per cent of the programs were at a high level of implementation (an increase of 10 per cent over 1983);
- more than half of the programs remain at a low level of implementation;
- time-allotment for ES remains low, and integration (with other curriculum areas) was found infrequently.

Again, questions and recommendations raised at the Administrative Council were related to improving implementation procedures, training, supervision, and the like, and sections of the curriculum were revised to include new elements and to make some parts clearer.

Implementation at the school level

Our own 14 interviews provide a number of additional insights on implementation at the school level. We asked in particular about the nature of changes in the classroom and factors contributing to and/or inhibiting implementation. We start with the two interviews with people external to the school - the co-ordinator and the area superintendent.

According to the co-ordinator:

> "We see environmental studies as a major vehicle for teaching higher-order thinking skills, decision making, claim making."

We asked what aspects of the program were already in place when the planning first started in 1979:

> "Virtually none. This was one program that when we started, virtually nothing was in place....We went out to speak to teachers about the basis of that document - the Ministry Primary-Junior guideline - and found that the whole concept of the environment of the child was absent....There was zilch in the curriculum for Environmental Studies. Teachers across the hall from

> each other were teaching entirely different things....They all had their best topics....The whole notion of learning-growth was absent."

We will not reiterate the development and field-test activities, as ES essentially followed the official five-stage process described in chapter 2, one which mobilizes the involvement and development of a large number of teachers and principals. The role of evaluation and data-gathering becomes especially clear in the interview with the co-ordinator.

> "Support staff don't have the authority to see that implementation procedures are carried out. Our only tool is program evaluation. Most support staff rely on unobtrusive data. For example, we note whether we are seeing requests for certain material, or if principals are asking for training for themselves, or for us to do in-services. We weren't getting enough requests, so we decided it was time for a program evaluation. I knew from the data that things weren't getting done. It was 1982/83."

In different parts of the interview, he elaborates on the findings and their implications:

> "The evaluation suggested that from one-third to two-thirds of principals were not really effective in implementing the program. That caused a shakeup at Administrative Council. Out of that a whole series of new strategies developed for implementing environmental studies....The data suggested that adoption was mainly on the part of the teachers, not as part of school policy, and that it was not supervised and checked out....We did the evaluation by ASG. One superintendent was blocking it and created a kind of umbrella where some principals didn't do much....I think the Director played a critical judgement role when data came in. He chaired the superintendents' meetings. He was in a position to declare if things were not enough in place. In his goal packages with superintendents, he came down very hard on some of them for not meeting their role. He used the program-evaluation information."

He also identified the critical role of some principals:

> "Some principals became leaders. Some became exemplary and broke up the club so that others could see "he's doing it and not having problems." Some of the principals were very good...analysing level of

> program use and strengths and weaknesses in their buildings. And presenting courses of action which may involve organizing workshops in the school, leading them themselves, sending teachers to writing teams and subject councils, encouraging teachers' participation as presenters in workshops. These provide a way to get people to organize and consolidate their thoughts."

The area superintendent had been appointed a little over a year before we did our interviews. Thus, he had little knowledge about the history of ES in the area. He did provide some additional information. He highlighted the role of the principal as being responsible for seeing that implementation happens, by providing or arranging for in-service training in what's expected in implementation, resources, etc. He also referred to the goal packages of the principals and indicated that three (of the eight elementary principals in the area) had ES as a priority in that year (1984-85). In monitoring implementation, he indicated that his main sources of information would be the quarterly meetings with the principals to review actions contained in the goal packages, and the annual program reviews by Curriculum Services on particular programs. He commented on the curriculum orientation of principals:

> "I can see it in their goal packages. They are writing specifics about what they are doing on curriculum priorities. They are not just writing something down to satisfy an accountability requirement."

The views of the four principals and eight teachers are presented under two analytical headings. The first pertains to the nature of the kinds of changes that teachers faced in implementing ES, and the second to the factors that helped or hindered or otherwise characterized the process of implementation at the school level.

Nature of the Changes

The eight teachers talked about the need for consistency in the curriculum across the county and the priority for complex skills arising from Ministry and/or County policies as reasons for the development and introduction of the ES program. Teachers also described what changes they faced. All eight teachers could describe the general nature of the change. Some were more specific. Three teachers claimed that they were integrating ES across the curriculum (integration can be understood as a very high level of implementation):

School A	"The biggest change for me was in the area of methods with the inquiry approach. I could see value in it, but I don't know if I believed in it. It took me a while to stand back and let the kid learn on his own." (Teacher Gr. 3/4)
School B	"The biggest change for me was from teacher-directed to student-centred - from content to process, to put it in a little different way....I am now integrating ES across curriculum, and now language across the curriculum is being stressed. I enjoy that. It is meaningful." (Teacher Gr. 3/4)
School C	"The change for me was in methods, materials, and beliefs. I saw a need from the beginning. Thinking skills are very basic to living." (Teacher Gr. 5)
School D	"The way I teach it is that I try to use an integrated approach, though I do have a time-period set aside for ES. I try to integrate it into reading and spelling and other areas too....I used to be very teacher-oriented. I lectured; the kids took notes. Now the children are more involved....I think I've been influenced strongly in my beliefs about integration and language across the curriculum. I'm strongly oriented towards benefits for students. I've become more concerned with problem solving, decision making, and complex skills where kids are thinking, not just spewing back information." (Teacher, Gr. 2/3)

Three of the four principals indicated that the priority in the current year was reading and writing (a decision that had been taken by principals at the ASG level). The fourth was planning to carry out an evaluation in the current year of the implementation of ES (see below). All four principals recognized that ES should be integrated across the curriculum (e.g., with reading and writing).

The Process of Implementation

Table 7.1 is a summary of the key factors and the number of times each was mentioned by principals and teachers (maximum 12).

Table 7.1 Factors Facilitating Implementation of ES at the School level

- The principal, including the use of plans/procedures	(12)
- In-service	(11)
- Teacher-teacher contact	(9)
- Curriculum consultants	(10)
- Good program and resources	(10)

We asked each of the principals to describe in as specific terms as possible their role in implementing ES. In two of the schools, the description was quite specific and elaborate.

> "In 1981-82 I did some interviews regarding the evaluation of ES....Documents would go to the school but they were not used unless the principal gave it priority. After the evaluation, there was more emphasis, and principals were urged to prepare implementation plans. It was discussed at principals' meetings, and the support team ran related in-service sessions.

> "I offer assistance in bringing in support-team people. I have times, for example, today at 11:10, when I took the primary division, to give teachers some release time so that they can plan as a group. When teachers work on school time they are very productive. It is curriculum-planning time. I share this with the vice-principal - that is a very important part of his training period." (principal, School A)

> "Every fall I ask them to plan their year and show me how they are going to address different elements of ES, with some time-blocking....I expect all eight or nine sections of each program to be addressed, but in each section there is negotiation between them and me over their plans....This term I am planning to have an evaluation of the program. I am going to have someone help me interview all staff about their use of each section and difficulties they are having....In my first year I did an evaluation, focusing on skill development. It was very extensive. Every teacher was interviewed. I co-opted support staff and some fellow principals. My vice-principal helped. He had no past experience in that area. I feel that it's very important for principals to be in-serviced in learning how to evaluate programs.

> "The evaluation of ES is planned for May. I am going to look at how successful implementation is at each grade level and what obstacles to implementation there are. I want to gather information for next year to get very specific about in-service and budget. I learned a long time ago that, if you can demonstrate you are supporting county priorities, you can get money. I've never had a problem getting money. With regard to the interviews, I have a new vice-principal. He wants to be trained in program-evaluation. I will invite other principals to assist. I'll involve a couple of the teachers who are interested in program evaluation." (principal, School D)

The principals in the other two schools talked in more general terms, but their comments also indicated that they were involved in the process. For example:

> "The biggest change for me was that we had to become familiar with the program and figure out how to implement it. I welcomed that, but at the same time it was difficult to figure it out. Each principal had to set up an implementation process for his school. We did it by grade levels, in bits and chunks....We had to learn new techniques as well. For example, needs assessment and how to determine what skills and

> materials were lacking, and how to make action plans to meet those needs. Out of those came a lot of professional-development requests for ES.

> "You have to have a plan. You have to spend as much time implementing a program as developing it....There has to be time for teachers to learn the program and to practise it. You need two to three years for implementation. You really have to set up a process for implementation." (principal, School C)

Teachers also cited the importance of the principals' actions, again in quite specific terms in schools A and D:

> "The principal and vice-principal are really helpful in managing time. They take our classes, get supply teachers, etc. If I went to one right now and asked to visit other classrooms for half a day, they would work it out." (teacher, School A)

> "The principal has given me a lot of support and opportunities to meet with other teachers....He has provided a supply teacher for me to go to workshops. He encourages people to go to workshops....He has also pushed me, because of my interest in the program. He got me to make presentations. He gave me the time to prepare for them. I have learned a lot from doing that." (teacher, School D)

The remaining four categories - in-service, teacher-teacher contact, the role of curriculum consultants, good programs - can be treated together because they overlap and interact. We also define these aspects more broadly to include teacher involvement at the earlier stages of program development, because this is an important form of teacher in-service training or development in the East County model.

A few illustrative quotes suffice.

> "Teachers here are very receptive to ideas relating to new curriculum and to the way curriculum is handled in this county. They appreciate the fact that something is not just published and handed over. It's been very carefully orchestrated on the part of the Board....We have not only used people from the support team but we have used some of our own personnel to assist in implementation...so there was sharing across the school between teachers as well." (principal, School B)

> "Every program took at least three years. People across the system were aware that these things were going on. People interested, had the opportunity to field test if they wanted. It was never a big surprise when it came in. By then, people were familiar with parts or with all of it....Principals are expected to have implementation plans. It was not that way in the early stages. That realization came later.
>
> "Four or five years ago I started developing implementation plans. Now I use it with all programs." (principal, School C)
>
> "Presentations were made by co-ordinators and people who had been implementing during the field tests. The workshops continued over three years....Also we teachers have to write our programs and indicate what we plan to cover each year in all areas....We have to hand them in to the principal....The workshops were also a help. And in School PA days. We specifically talked and planned a unit with the principal. We planned an inquiry. Then we tried it. Then we shared it....
>
> "I didn't feel comfortable at first with the co-ordinator's and consultant's role. People were leery of the evaluative connotations of the role. Having worked with these people now, I realize that it's not an evaluative role....I want more opportunity to get out and learn now." (teacher, School D)

Obstacles to implementation were mentioned less frequently. Many that were identified related to aspects of earlier implementation approaches that had been addressed since (e.g., focus on outcomes without adequate attention to teaching strategies or materials, not requiring principals to do implementation planning). Problems that were mentioned had to do with perceived difficulties of "covering" all the material, and the complexity of implementing and measuring higher-order skills.

> "My greatest concern is "How am I going to get it done?"...I feel pressure in ES. I don't know how to evaluate." (teacher, School A)

> "I find the Grade 4 ES overwhelming. A lot to cover. I can't do it all....I talk to the other teachers about it and also to the principal and vice-principal. I would rather do a limited amount well." (teacher, School B)

> "ES was a difficult task to implement because it had many facets and no clear direction to begin with....Math was easier. The textbook is already written. For ES, there weren't any good models available for good ways of doing it, when we started. ES is a tough subject to implement." (principal, School C)

> "Now I think the teachers in my school have got the knowledge and content and are getting better at complex skills. One of the major weaknesses is in measurement and evaluation....That's partly the reason for the formal evaluation now....I want to be able, next year, to focus heavily on complex skills in ES and I want to do some first steps with measurement and evaluation of students in ES. That is scarey for some people and it's a tough one - measuring growth and complex skills." (principal, School D)

> "Probably time and money for people to have the opportunity to visit other classrooms and go to workshops, or to have the time within staff meetings to share difficulties and to know what the person next door is doing." (teacher, School D)

In response to a probe about other obstacles this same teacher said:

> "I think it is a very different philosophy, the swing from kids recalling specific knowledge, to teaching skills and values. That's a major change for teachers."

To conclude, a number of evaluative comments are contained in the data presented in this section. We know also from the county-wide evaluation that some 40 per cent of the teachers are likely implementing the program at a very high level - a major accomplishment, given that the system started from scratch and is addressing a complex set of learning objectives. More work needs to be done. The co-ordinator puts the progress in perspective in reflecting on the 1983 evaluation:

"It alerted the whole adminstrative group about the possible gaps between perceived and actual degree of implementation. That was a bit of a shock for them. They were expecting more than they saw, given the resources that had been put in. But there was a positive side, too, since we began with nothing....Now the total system has a commitment to it. The expectations are totally visible and known."

II REGION NORTH

We examined implementation of the Family Life and Sex Education (FL/SE) priority in four elementary schools in one area of the Region North Board. Documents reviewed included a Region Curriculum Aid to FL/SE (1982), a Memorandum from the Director which communicated the implementation plan to school staff members, Area Office memos, Area Office and system progress reports, and school-program documents. Interviews were conducted with the Assistant Area Superintendent, the Board FL/SE Consultant, three principals, two vice-principals, and 11 Grade 4-6 teachers (School A=5; B=3; C=2; D=1).

Our choice of FL/SE was serendipitous in that we did not know initially that it became the model for the innovative Board priority approach to implementation. Thus, the description that follows may be less a picture of how implementation usually proceeds than one of how the sample schools responded to an experiment in curriculum change.

A. Program Description: Family Life/Sex Education

Each school is supposed to define its own FL/SE curriculum consistent with Ministry and Board curriculum guidelines. The Region Curriculum Aid contains a K-13 scope and sequence for 18 guidelines (e.g., Family Studies, Physical and Health Educaton, Individual and Society) and 20 FL/SE topics (e.g., reproduction, puberty, relationships, family planning, parenting, human sexuality). Pertinent excerpts are appended. It also includes a bibliography of approved audio-visual resources (films, videotapes) and print materials available through the Board's Audio-Visual Services, Resource Centre, and the Regional Public Health Unit.

The choice of strategies for teaching the program is basically left to schools and teachers. Specific techniques were recommended, however, for responding to sensitive questions related to FL/SE topics. These were outlined in a memo from the Director to all teaching staff. Additional advice for curriculum planning, questioning techniques, and sample lessons were included in the Curriculum Aid. Board policy states that teachers objecting "on grounds of conscience" to teaching certain parts of the program could make arrangements with their principal for another teacher or a community resource person (e.g., Public Health Nurse) to take over for those topics.

The Board's intent is that every student will receive the program. The program tends to be taught informally and integrated into other subject areas from Kindergarten to Grade 3, and as a more formal program (particularly the sex education part) in Grades 4 to 6. All K-6 teachers are responsible for implementing the program. At Grades 7 and 8, the program goes on rotary. Normally it is done by the Home Room, Physical Education, or Guidance teacher. The actual method of delivery is up to each school.

Because of the controversial nature of its content, a unique set of procedures for parent involvement was built into the FL/SE Program:

- annual parent-staff meetings in each school to review and approve program content, materials, strategies, etc.;
- publicaton of decisions made at parent-staff meetings in school newsletter;
- written permission from parents prior to delivery of formal part of program;
- procedure for withdrawal of students from classes dealing with FL/SE at parent request.

B. Implementation

Central Mobilization and Implementation Support

Development of a Curriculum Aid to FL/SE was authorized by the Board in 1978 and completed by a Curriculum Task Force in the spring of 1982. "Implementation" of the program was a system priority for 1982/83, with the expectation that school programs be in place by September 1983. As previously reported, the central approach to implementation had some innovative components: Region steering-committee and implementation plan, memo from Director to teachers, in-school resource teams, Area orientation meetings for in-school teams, school staff and parent meetings to present the program and plan, Area and Regional monitoring during initial year. Additional central support for initiation included the Curriculum Aid, in-service opportunities (courses, workshops), resource materials, and resource personnel (steering committee, Curriculum Aid Task Force). The current FL/SE Consultant was a member of the Curriculum Aid Task Force at the time. She took part in Area meetings, assisted one Area Office and several schools in program planning, helped school teams give in-service sessions for staff and parents, and presented Area/Region PD Day workshops.

Implementation of the FL/SE program was a system priority for one year. An end-of-the-year progress report from operations reported "that the implementation of the program is proceeding smoothly with strong, positive support from parents" and that "major problems did not develop." Regional monitoring did not extend past the initiation year. System support continued, however, through the appointment of the FL/SE Consultant, arrangements with the neighbouring University to offer an accredited FL/SE course, and the acquisition of additional resource materials. The Consultant described her involvement in several kinds of ongoing support activities: organizing PD Day workshops, presenting after-school workshops, attending department-head meetings, assisting with in-school program reviews, recommending new AV resources, meeting with school nurses, liaison with external researchers, and reporting on system concerns (e.g., sex abuse, teen pregnancy). At the time of our study, the Consultant was promoting a sexual-abuse unit and had conducted 25 school workshops on this topic during the preceding year.

Area Initiation and Implementation Support

Area Office interventions to support implementation of the FL/SE program in the sample Area were numerous the first year:

- Area Orientation Meeting for in-school teams (Oct. '82);
- discussion of FL/SE at two Area Principals' Meetings;
- creation of principals' committee chaired by Asst. Supt. to deal with principals' concerns;
- facilitating meetings between schools involved in student transition from Grades 6 to 7 and 7 to 8;

- development and distribution of sample K-10 program by an Area committee (Asst. Supt., teachers, Public Health Nurse);
- encouraging curriculum-sharing among Area schools;
- encouraging teacher participation in Region sponsored FL/SE course (Fall '82 - 6 teachers);
- organizing Area PA Day Workshop (Jan. '83 - 50 teachers);
- giving priority to FL/SE-related conference requests;
- lobbying for FL/SE workshops on Region PD Day (Apr. '83);
- encouraging use of implementation-resource personnel;
- monitoring implementation progress (principal-performance reviews, school newsletters, workshop requests, school-program documents, written progress reports from principals).

The Assistant Area Superintendent carried much of the leadership responsibility. Members of the Region Curriculum Aid Task Force assisted in developing the Area curriculum aid and in the Area FL/SE Workshop. Excerpts from the Area Office's June 1983 implementation report round out the Area picture of program initiation at the elementary level.

Staff and Parent Meetings

> "All elementary schools established school teams that conducted school meetings with staffs. All but two schools held the required parent meeting to present the school's FL/SE program."

Program Scope

> "Most schools implemented curriculum for all grades in the schools. A few worked exclusively on their Intermediate division (Grades 7-8) this year....A few others focused on the Junior Division."

Obstacles

> "Some schools reported that teachers were initially

> showing some reluctance in covering sensitive areas, but that workshops were helpful in overcoming their concerns."
>
> "The principal difficulty encountered in most schools was the availability of resources, particularly film resources."

Overall Status

> "Principals reported the implementation to be proceeding smoothly, with strong positive support from parents. A great deal of pride was indicated in the quality of programs developed by staffs....Most schools reported that no additional help is still required."

After Year One, the superintendents in this area set up an information bank of good programs and resources, and continued to monitor the status of implementation through performance reviews (of principals), school newsletters, conference and workshop requests. We cannot really say whether they gave significantly more attention to FL/SE than to other projects. It is clear, however, that they kept persistent pressure on principals to follow through with the Region plan.

Initiation Timeline and Procedures

Initiation procedures were completed and classroom-level implementation was "officially" underway by the spring of 1983 in Schools B and D, September 1983 in School C, and the fall of 1984 in School A. Principal A attributed the delay to time constraints and competing priorities.

As indicated below, principals varied in how they managed the in-school team requirement. Teacher reps from each grade division were chosen in most schools. Leadership was delegated to lead or regular teachers in all but School B.

In-school Team Composition by Role and School

A	B	C	D
	Principal	Principal	Principal
Vice-Principal	Vice-Principal		
	Specialist	Lead Teacher	Lead Teacher
Teacher Reps	Teacher Reps	Teacher Reps	

The Region plan advised school staff member to present detailed program outlines to parents. This was interpreted in most schools to mean that in-school teams had to write documents similar to courses of study developed in response to conventional guidelines. School teams in Schools A, C, and D developed and presented school curriculum documents based on the Region Curriculum Aid. Grade division meetings were held to get input and agreement from other teachers.

Principal B gave each teacher a copy of the Regional Curriculum Aid. He and the Vice-Principal met with each grade division to clarify implementation requirements. Teachers, by division, determined what they would cover as a group and then worked out individual curriculum plans. Selected teachers presented their programs at the parent meeting. At the school level, FL/SE was formally written into existing courses of study in Health, Science, and English, rather than as a separate program.

Initiation Assistance

In-school team members in three of the four schools were involved in more professional-development activities outside the school (orientation meetings, area writing team, workshops) and had more contact with resource personnel than nonteam members during the initiation stage of implementation. Other teachers benefitted mainly from staff-meeting discussions and written aids. Several teachers said they felt no need for special in-service training in this particular curriculum. The exception was School B, where all the teachers and the administrator interviewed participated in external staff-development activities and had contact with resource personnel in the school. Where in-school assistance from system personnel was provided, it included materials assistance (recommending resource materials, information linking, etc.) and in-service training (suggesting teaching strategies and responding to questions and concerns).

While everyone indicated that they received the Director's memo outlining the Region Implementation Plan and expectations for the FL/SE program, it is not clear that the Regional Curriculum Aid reached all teachers in each school. Respondents from two of the four schools reported access to program documents from other schools during the curriculum-development process.

We do not have a clear explanation for differences in the amount of assistance across schools. The principal's orientation to, and encouragement for, external assistance, teachers' sense of expertise, and teacher knowledge of resources were three factors mentioned in our interviews.

Implementation Follow-up and Ongoing Support

Among the teachers interviewed, participation in ongoing professional development outside the school for FL/SE was virtually nil. Contacts with the FL/SE Consultant occurred in two schools in conjunction with the Consultant's recent sex-abuse workshops. Most teachers said they had not felt the need for consultant help. The one individual contact that was reported concerned access to Board films. The greatest ongoing assistance has come from the Region Resource Centre and Audio-Visual Services, Public Health Nurses, and fellow teachers.

School nurses have helped teachers acquire resources (films, visual aids, print materials); assisted in presenting films; given talks; and assisted with parent meetings. Their involvement is special to this program.

Respondents from three schools talked about informal discussion and sharing of experiences among teachers, and about peer advice (clarifying program requirements, anticipating parent and pupil reactions, seeking/offering resources, and emulating partner's practice). Those seeking peer advice were usually teachers who felt uncomfortable teaching sex education, new teachers to the school, or teachers reassigned to a new grade level. Those providing advice were typically grade-level partners, former school-team members, other teachers known to have taught the program with some success, and librarians. Teachers in two schools engage in teaming, but that is not particular to this program.

Roles of Principals and School Superintendents

During the initiation stage of FL/SE implementation, principals and vice-principals carried out the required procedures (e.g., formation of school teams, parent meetings) and facilitated program development by the in-school teams (e.g., clarifying expectations, contacting resource personnel, getting sample documents and information, providing resources, problem solving, arranging typing). Vice-Principal A and Principal C participated in program development. Principals A and D helped get school team members out for professional development. Principals A, B, and C enabled resource personnel to come in.

After school programs were officially in place, principals had ongoing responsibility for annual parent meetings and permission procedures. One took on the job of ordering films for the AV Centre. The support from principals after initiation mainly has been to maintain expectations for implementation, to convey a supportive attitude, and to buffer parent concerns. No one reported any formal monitoring of program use by principals.

By and large, the support interventions of the Area Office were not acknowledged in the sample schools. One teacher said she went to the 1983 Area Workshop at the behest of the Area Office. One school administrator said Area memos and the planning aid helped give direction to school efforts. None reported any Area Office monitoring. The principals all said, however, that there was a clear Area mandate to comply with the Region Plan.

Differences in Program Content and Delivery

FL/SE-curriculum documents were obtained from three of the schools. As indicated below, school-curriculum plans varied in detail.

Components of FL/SE-Curriculum Plans by School

	A	B	C	D
Objectives	X	X	X	?
Content	X	X	X	
Resources	X	X	X	
Strategies	X	X		
Evaluation techniques		X		

In general, our data suggest that program documents were more organized and complete in the schools reporting greater external staff development and in-school assistance from resource personnel, and sharing of documents from other schools (i.e., in Schools A and B).

The major reported difference in programs relates to how FL/SE is integrated into subject areas at the Junior level, and whether it is taught as a special unit of study in Health or Science. The most highly integrated program was found in School A:

> "It is not taught as a separate subject, rather integrated into everything we do. For example, this week in Environmental Studies I'm doing a unit on human growth and development. That's a Family Life/Sex Ed. unit too."

> "It is taught as an integral part of integrated units. We know where the match is. We know how the documents work together."

In School B the program is formally written into courses of study for other subjects, but teachers still associate it with a special sex education unit in the spring.

> "I do it a week in May...everyday for a week. The time depends on the availability of the film."

> "I ordered films, arranged for overheads and charts.... I checked it into my Health time, and for a period of seven weeks I worked through the course of study."

In Schools C and D, the Junior-level program is described mainly as a special unit of study, with occasional and informal integration into other subject areas.

> "In the Junior grades, occasionally the topics and concepts in this program will be integrated with other subjects. However, the main part of the program will be taught as a unit." (FL/SE Program Outline, School D)

> "It wasn't conspicuous. It was absorbed into the curriculum. The part that was new was the component on menstruation in Grades 5, 6, and 7 and some aspects of anatomy. We tend to blitz...menstruation in the Grades 4 and 5 girls group." (School C)

Generally it appears that the schools that benefitted from the most assistance during initiation (A,B) had the most formally integrated programs.

The Nature of the Change

The overall impression given in all four schools was that implementation of the FL/SE program did not involve much change in curriculum content or teaching practice. It was more a matter of organizing in writing how the content requirements were already being addressed in the school. When asked directly about changes resulting from the introduction of formal FL/SE programs in their schools, those interviewed (N=16) listed the items in table 7.2.

The main effects of implementation on teachers in these schools were to make people conscious of the content, increase their attention to that content, add some new topics and materials, and feel more secure about teaching sensitive content. Two teachers talked about the difficulty of overcoming initial anxieties about teaching sex-education topics. For one, these concerns disappeared after her first experience teaching a unit. The other did not yet consider herself a "user" of the program. Most of the teachers interviewed had little difficulty adjusting to the official programs.

Our data are insufficient to make strong claims about the effects of different patterns of assistance on reported changes in different schools. It is clear, however, that assistance did not necessarily lead to changes in teacher practice. In fact, one of the main goals and effects of assistance in this project was to help school staff members understand and document what they were already doing to comply with the guidelines (i.e., "gap analysis"). One thing we can say is that teachers in schools that received the most assistance were more articulate about the program and how it affected them.

Table 7.2: Actual Changes in Content, Practice, and Beliefs

Changes in Content and Materials

- use of new learning materials (6)
- more awareness of content (5)
- addition of sex-education content/vocabulary (4)
- more depth in content (2)

Changes in Teaching and Planning Practices

- bringing in experts (e.g., nurse) (3)
- new/improved teaching strategies (e.g., questioning techniques, discussion) (3)
- more ideas for integration (2)
- use of a curriculum guideline/aid (1)
- lesson-book entries (1)

Changes in Attitudes and Beliefs

- more secure about content (4)
- accepting responsibility for sex education (2)
- appreciation of student maturity (1)

We asked teachers and administrators in each school to comment on factors contributing to, and hindering, implementation of the FL/SE program. The main contributing factors in the eyes of school personnel were the support of parents (or lack of opposition), the support that teachers gave each other, the Region Curriculum Aid, and the availability of external and in-school resource personnel to assist in the implementation process. The receptivity of students was also important.

The major obstacle reported by school staff was the initial anxiety of some teachers about teaching sex education. These concerns were reportedly alleviated by in-service sessions, assistance from colleagues and resource personnel, and trial use. Other major obstacles include problems in acquiring film resources when needed and the fear of parent opposition. In the end, anxieties about parent opposition were unfounded. Many attributed this, however, to the careful approach to parent consultation. A few school staff members talked about problems in finding time to comply with expectations for FL/SE implementation because of the presence of other school priorities and system demands. Apart from access to resources and overload problems, school staff did not name the major obstacles to implementation previously reported from our central office interviews (chapter 6). Thus, the region initiation process may have been successful in alleviating some of the usual problems, although it is worth repeating that the extent and complexity of changes required by FL/SE in terms of new skills were not seen by teachers to be major. The reported anxieties about program content and parent reactions seem specific to this project.

Comparison With Other Changes

We asked principals and teachers in the four schools to compare the way the FL/SE program was implemented with the way most curriculum changes are carried out. The key differences were the amount of communication with parents, the short mandated timeline, the allowance for program-sharing, and the amount of public attention given to the project. The differences were mostly seen as responses to the controversial content of the program, rather than as an alternative model for implementation.

The overall process was generally viewed as similar to most curriculum changes. This is interesting, because the FL/SE approach to implementation was described in our central office interviews as an alternative to the usual approach. School staff members tended to view the project in terms of how it affects them in the school, not in the terms of how it was carried out across the system/area. Only one person mentioned that the quantity of support given to teachers for implementation was greater. This suggests that teachers and principals who tend to use support services took advantage of the increased opportunities for help, while those that do not, did not.

III WEST PUBLIC

The focal innovation selected in West Public was Environmental Studies at the Primary grade level. We interviewed principals and two teachers each from four schools in one area of the system and reviewed all pertinent documents. We first describe the innovation and its immediate history, followed by an analysis of the interviews.

A. Program Description: Environmental Studies

The Primary Environmental Studies program (Kindergarten to Grade 3) in West Public has been developed in West Public in accordance with The Formative Years, the Ontario Ministry Curriculum Guideline covering Primary and Junior grades. The purpose of the program, according to the Board's curriculum document, is to develop certain knowledge, skills, and attitudes of children. The broad framework is stated at the beginning of the document:

- Critical concepts and generalizations from the disciplines of Science, Social Studies, Health, and Family Studies. These will enable the child to perceive, understand, and evaluate the relationships within the social, biological, and physical environment. Among these relationships are:
    - relationships among people;
    - relationships among things both natural and man-made;
    - relationships between people and things;
    - relationship of the child to the previous three, and to himself or herself.
- specific cognitive and psychomotor skills - namely, basic thinking skills; critical skills from the disciplines of Science, Social Studies, Health, and

Family Studies; problem-solving skills; gross and fine motor skills;

- specific attitudes, values, and social skills which enable the child to work out a personal system of values reflecting the priorities of a concerned society and, at the same time, recognizing his or her integrity as an individual. It should enhance self-esteem and foster communication skills, group dynamics skills, and enthusiasm for learning;
- creativity and divergent thinking.

In addition to the study of the natural and social environment, an integration of other subjects and a "hands-on" approach are encouraged. The program includes such units as "my friends at school" (K), "the family" (Gr. 1), "pets" (Gr. 2), and "people depend on energy" (Gr.3). Curriculum units have been developed for each grade. A "levels-of-use" (LOU) chart had also been developed with descriptions of teacher behaviour for each cell in a matrix that listed the components of the curriculum. The introduction to the document states:

> This curriculum has been introduced in accordance with the processes of the Curriculum Implementation Model, Phase One (see chapter 4).

To oversee the production of the curriculum, a Steering Committee for Environmental Studies was established. The committee is chaired by an area superintendent who previously had been instrumental in the development of the geography curriculum and the Curriculum Model. Other committee members include the Primary Supervisor, a primary consultant, a former values consultant who was then a vice-principal, and supervisors in geography-history, science, physical education, and library. The same Committee has had overall responsibility for the program during two distinct periods in its history.

According to information collected during interviews, the former Environmental Studies (ES) consultant (1980 - 1983) drew upon her expertise in child development and curriculum design to produce a very sophisticated and detailed binder. The reaction to the binder was that, while it was comprehensive and of use to consultants with a curriculum background, classroom teachers found it quite overwhelming. In 1983 the consultant retired and a new consultant was appointed from within the system to "put wheels on the original document". She had a Master's degree in curriculum, participated in laboratories dealing with communication and conflict theory, teaching experience in geography K-8, and a reputation for sparkle and energy.

The second period in the development of the program began with the appointment of the new consultant in June 1983. Events since then include the following:

Summer 1983 - unit writing by teachers, K-1

Fall 1983 - units edited with teacher assistance

January 1984 - in-service, three 2-hour sessions, 40 people

February-June 1984 - pilot testing and feedback from a variety of contexts

Summer 1984 - re-editing by teacher teams

January 1985 - professional development

- mandatory for about 300 K-1 teachers
- Superintendent of Curriculum and Special Services and Primary Supervisor participated

- the Consultant presented a slide-tape overview with emphasis on children and anecdotes

- teachers were asked to teach one unit, or parts of it, before the end of June 1985

Fall 1985 - full-system implementation for K-1, required five years after it began

The program for Grades 2 and 3 was running about one year behind the K-1 project, as it was being piloted during the January to June period of 1985 in preparation for system use around one year later. The Consultant reported that the preparation of binders was taking about 95 per cent of her time. It should also be noted that the Implementation Team was the same as the Design Team in this case, and the Primary Supervisor was the main contact person for superintendents.

In-service activities for Environmental Studies were extensive. At the full-day session in January 1985, noted above, teachers and principals were made aware of the levels-of-use charts included in the original binder which had been prepared by the former consultant. The impact of the charts on teachers was viewed as "horrendous". The Consultant received a phone call from a teacher who reported, "my principal says I'm supposed to be on Level 4!" The feeling of the Consultant was that the ES program itself was new and having levels of use attached to it was a "double whammy". She was frightened because, by following the Model, something she really cared about (the ES program) was at risk. At this point, she shared her feelings with the Chairperson of the Steering Committee, and his reply was, "Trust your feelings and back down on the levels of use." The result was that the Consultant went to area meetings of principals and said, "Sorry, I need to do more homework." Upon reflection it was realized that area superintendents should present LOUs to principals, yet area superintendents had not had in-service training themselves at that point. It was concluded that the timing for the presentation of levels of use in the model was inappropriate.

B. Implementation

The four schools are all from the area of the Superintendent who is also Chairperson of the Environmental Studies Steering Committee. Each school was selected because of involvement in implementation, but, because each is unique, separate headings will be used.

School One. The two teachers interviewed share a Grade 2-3 classroom, and one of them had piloted a unit in the ES program. During the January to June period of 1985 this teacher had assumed responsibility for teaching a unit of the new, system program, and the other integrated it with the language arts. Both reported that they did their planning along with the librarian, and she was seen to be "a super gal on staff". There was a general feeling that consultants would come any time, but they were usually called upon to assist with problem students rather than with curriculum implementation.

The Principal of this school has responsibility for three campuses, so he believes that he can only hope to be aware of new programs to the extent that he will be able to articulate aims to teachers, explain the program to the community, help to provide materials, and arrange time for teachers to have related professional-development training. He expressed strong support for the ES program and considers it "a tremendous step forward for kids". School objectives for 1984-85 include each Primary teacher completing at least one unit of the ES program. On more general topics, the Principal pointed out that many changes were underway, including a new reading series, a controversial program called "Operation Prepare", a new English curriculum at the Junior level, computer-related programs, and implementation of Bill 82 regarding special education. He called the latter "an incredible change" and a "bottomless pit" as far as costs are concerned. This Principal teaches large groups of students periodically so that teachers can have time to get together for professional development. He also thinks that it is important to serve on system committees and to be involved in field testing, so that central office people will be kept in touch with reality.

Each teacher reports regular consultation with the librarian and assistance from the Primary Teachers' Association. The pilot teacher said she had to acquire new skills in order to do as much grouping as the new program required; and she also had to acquire knowledge related to aspects such as Venn diagrams. She liked the balance of direction and choice in the new program. Both teachers appreciate what they call excellent support from the Principal and from consultants who came promptly when called. Neither saw the Area Superintendent very often. Sources of pressure for both teachers included many memos and forms which require a response "yesterday". The one teacher, it seems, spoke for both when she said, "I'm very happy with what I'm doing and where I am."

The ES unit is being implemented as expected in this school. The implementation is assisted by the system view and the general endorsement of the Principal, earlier pilot testing in the school, carefully prepared system documents, a strong team of teachers, and the librarian. Pressures appear to be related more to administrative details of the system in general than to problems with curriculum implementation or the Model.

School Two. The two teachers who formed a team in a double-sized classroom had been involved for two summers in writing the ES program. During the period from January to June 1985, they were implementing at least one unit of the system-level program. The teachers maintained contact with the Primary Consultant who was in the school regularly every week primarily to serve on a Learning Resource Team.

In 1978-79 the Principal indicated that he was president of the Principals' Association when that group urged central office to sort priorities and not attempt to go in "26 directions at once". Since then, Ministry documents and the new Director are deemed to have assisted in the process which now works "pretty well". In speaking about ES, he said that it was now being piloted in Grade 2, with each teacher expected to teach at least one unit. He expressed the opinion that involvement of the teachers in writing teams resulted in little anxiety during implementation, and that the process used in relation to ES was "the most effective so far". Good teachers have files of resources and each new curriculum requires a change, according to this principal. He went on to say that even "Spell Binder" was a major shift and he had had to encourage teachers to try one part of it at a time and then follow up their attempts. He commented that principals require in-service training before the teachers have it and that principals need to be total curriculum leaders. Consultants, in his view, were easily accessible, but teachers, nevertheless, feel inundated and wonder "what's next?" This principal considered the 10 half-days for Junior English in-service sessions as a bold step and he picked a teacher that he thought most capable of presenting it to staff members.

The teachers in this school work as a team, because they are in a double classroom. Both had devoted the previous two summers to ES writing teams, for which they had applied, first at the K-1 level and then for Grades 2 and 3. They said that they find their early involvement a real advantage when the program is being piloted. They expect to be involved as leaders in the fall of 1985 when the required in-service program is presented. In 1982 the "Getting It All Together" program was seen by them to imply that everything they had been doing previously was wrong. The New Mathematics they thought had been less "laid on". "When you take time to think about it, ES is not all so new, and I think I've always believed in it," observed one teacher with agreement from her colleague. The in-service training and the Primary Association are said to really help in coping with the number of binders and in avoiding feeling such pressure. Support from the Principal was recognized and a consultant was in the school on a regular basis; but no support is perceived as coming from higher administrative levels. These teachers liked the way units in ES build upon one another, and when they can adapt the units they say they "feel a little more comfortable". Money for binders and in-service training was no problem as they saw it, and they believed that the 10 half-day plan for Junior English is "going smoothly." They suggested that meeting in a small group in their own school is easier than meeting in a large group downtown.

The teachers interviewed, having been on writing teams, were committed to the ES program prior to system implementation. They made several comments to the effect that, with time for reflection, they realized that they had always believed in the principles underlying the ES program. Early involvement, a curriculum-oriented principal, continuous links with consultants, and material support, made implementation of the ES unit in this school relatively smooth. The teachers appear pleased with their involvement in development and implementation of the program. The Principal indicated that some programs, such as "Spellbinder", did not follow the CRIMP Model and he cautioned that the Model would be "okay as long as they don't go too heavy on the theoretical - teachers want practical."

School Three. According to one teacher, people at this school had volunteered to "do a topic" in the development of the Environmental Studies program but that they had not had confirmation. The system program was introduced at a professional day in January 1985, at which time the expectation that each teacher would try at least one unit before the end of the school year was made clear. The approach at this school was reported to be through using the teachers of Grade 2 and the teacher-librarian working together as a team. The librarian stated that the team would review the program binder, plan units, discuss materials, and keep up informal communication with inquiries such as "How did it go today?" She also pointed out that the activity-centre approach was new to some teachers and that units were evaluated. The Grade 2 teacher said that she liked to start from a topic of interest and develop group lessons around that theme. She appreciated clear expectations and guidelines but also some choice. In Environmental Studies she observed that in School Three they were in the process of "getting ideas together" to teach the required unit.

The Principal of the school believed that prior to the development of the ES program the teaching of related areas was "all over the map", with science the weakest component. He reviewed the development of the ES program from pilot to field tests to system in-service sessions which teachers and principals were expected to attend. There could be follow-up in-service or assistance from consultants if requested. Sometime after the initial in-service meeting, the program binders arrived at the school. The principal said that he knew which teachers attended the in-service session and when the binders arrived. In his view, he could do anything in relation to ES from nothing to asking a teacher what he or she was doing. He described his relationship to some teachers who were going to be doing a unit as "casual".

In discussing curriculum implementation in general, the Principal stated that teachers generally do not use a consultant but share problems within the school instead. He reported that his part in the process depended upon the problem and that there was minimal contact with the area superintendent. Curriculum in the system was improving all the time in his view, in terms of overall quality and better balance in objectives among knowledge, skills, and affective areas. Attempts to follow the implementation plan and design model were seen as beneficial. Sample lessons and provision of materials were considered to provide necessary support. It was noted, however, that the area of student evaluation was weak and that the in-service activities were still not at the point where teachers could take a curriculum and use it. Some curriculum, in the view of the Principal, bypassed the Elementary Curriculum Committee and was imposed without consultation.

The teachers also elaborated upon administrative assistance and other factors. The Grade 2 teacher indicated that the librarian was "terrific", that she would call upon the principal if there were problems, and that consultants were "good, but run off their feet". She added that she had asked consultants to come in "the odd time", particularly if she were working in a new grade level. Some dissatisfaction was expressed by this teacher with PD days, as choices had to be made among too many topics and they were held sporadically. More in-service days by consultants would be welcomed by her, whereas she does not always attend Primary group meetings in the school. She also mentioned the newly formed staff-development committee for the school which arranges sessions once a month at lunch hour. Overall she stated that there is more and more in-service training available all the time, and that it is necessary to realize that you can only do so much and that you must set priorities.

The teacher-librarian, who had been in the school for 13 years, believed that the principal should be the curriculum leader but that his role was not to cover classes to "free up" teachers. He can offer support if needed, in her view, and make sure that resources are available. She described her role in working with teachers as taking initiatives, offering materials, helping to organize, providing insight, and "keeping after people". Lunchtime meetings are common and she said that sometimes it is possible to "steal a few minutes" with teachers when a class is in the library. As she sees it, change requires working it through with teachers and building slowly from there - peer support is critical. Librarians Association meetings seven times a year and many informal contacts among the group are also considered important. The CRIMP Model is reported to be very familiar, and she commented, "What they are doing is excellent. I can't see how it can be improved. It is easy to use and the results flow from it."

In School Three the ES units are being implemented as expected, primarily by grade groups working closely with the teacher-librarian who is viewed as a very capable resource person. The groups do not appear to find it necessary to draw upon the resources of the Principal nor consultants, although outside support is known to exist, and the supply of materials and system curriculum documents is appreciated. The teachers are very positive about improvements in the process of curriculum implementation. The Principal thinks that progress is being made but that the in-service aspect needs to improve and that some curriculum initiatives do not follow the Model.

School Four. The Environmental Studies program was introduced at the Grade 2 level in January 1985 for this school, and three units were being field tested in Grade 3 according to the Principal and Grade 3 teacher who were interviewed. The Principal also reported that the school had been involved in pilot tests of the K-1 program and that suggested revisions had been incorporated into the final system document. The Grade 2 implementation had proceeded from the January in-service session, to a review and listing of required materials with the consultant at the school, and then to several visits by the consultant and active support by the Principal. The Principal said, "I pursue Environmental Studies like crazy."

The Principal perceived his job to be to show initiative and to be "the first one to try it". As an example, he said that he attended five once-a-week, evening, voluntary in-service sessions related to the ES program. He stated that he attended for the teachers in his school and appreciated getting into details well beyond what was possible at the opening in-service day. He said that he was "in and out of classrooms", as he much preferred that approach to levels of use. His view was that the timing was bad for introducing levels of use into the system. The $1500 that he had for materials was seen to be adequate, but he observed that some teachers do not consult the librarian as much as they should. The area superintendent should understand the philosophy of the program according to Principal Four, so that he can provide support and materials. The ES program was considered to be a sudden change for students and a mammoth change for teachers that would take years to be assimilated.

An interest in getting ahead in the system, a desire to influence the philosophy of the system, and a wish to assist in content decisions were given by the Grade 3 teacher as reasons for becoming involved in the field testing of three units. She expressed positive feelings about how units were laid out in detail, well beyond what was the case in other curriculum areas. She saw that thinking skills, not just facts, were stressed. The librarian and one other teacher were said to be involved in the field tests, and it was noted that consultants could be called upon if required, after the in-service sessions for field testers. The principal needs to believe in the curriculum and have some knowledge of it so that he can assist in procuring materials and "keep teachers going". This teacher observed that materials are available and "you feel good about it because you see kids learning". She noted that there was a pamphlet for guidance and a questionnaire for feedback on the units.

The Principal, in commenting upon curriculum implementation in general, stated that in-service training should be more on the philosophy of the program, instead of being just a presentation of materials. His view was that principals were major obstacles to implementation and that the system wanted principals who had problem-solving skills and could support implementation. There is better curriculum now, in the opinion of the Principal, as central office people are "really on top of things". He noted that the Board had shown the lead in offering 10 half-days of in-service training for Junior level English, but that the computer program was "just plopped" on schools.

Although a Grade 2 teacher was not interviewed, the Principal in this school sees himself as not only supporting indirectly, but also contributing directly to, the implementation of the ES program in Grade 2. The Grade 3 teacher did not mention the Principal as having a prominent role in the field tests that she was doing, but she did comment about the increased interaction in the school and the support which offset the risk of failure, as long as a teacher was perceived to be moving forward. The Principal stated that he kept the Primary consultant "coming and going" in relation to the Grade 2 program. General satisfaction was expressed with the system's approach to curriculum. Improvements in the quality of system documents and in the development process were described, although the computer program was noted as an exception to the Model.

Views of the System's Approach

The role of consultants in implementing the ES program varied in the four schools. In one school it was stated that consultants were usually called upon to assist with problem students, and in another a teacher noted that she would need a consultant if she were to have a different grade. In these two schools, however, the teacher-librarian was playing an important role in working closely with teachers to implement the ES program. In a third school, where the two teachers had been on ES writing teams, an informal contact was maintained with a consultant who was in the school each week for another purpose. In the fourth school, a consultant had made several visits to assist specifically with the implementation of ES. In this last school, the Principal also was actively involved in the implementation of the program.

Initiation and follow-up within the school is critical. In some cases, this does not happen. In those situations where it does, there are at least some different ways of doing it. In some situations the principal is the spearhead. In others, especially noted in this case study, the librarian can be the key actor operating under general, but not intensive support from the principal. For example, in School Three the librarian played a central role:

> "The Primary ES was put into practice in the January to June period. I met with teachers. We looked over the binder. I worked with the two teachers. We planned activities that grow out of the unit in groups of six students....We agree to go through the unit individually and then discuss it together about what's in it. Activity centres are new for some teachers.... After a unit is over, we evaluate it and say what worked and what didn't. We interpret it. We build on it. We frequently say, 'How did it go today?' so we try to correct it as we go along.
>
> "The role of the librarian is very important. I instigate it. What is, and what ought to go on. As resource person I offer materials, help organize the doing of it, provide insights, keep after people....As an instigator you build up a sixth sense. For example, I learned to go slow. My own enthusiasm rubs off, but you can't overwhelm people. You need to have practical resources. Support from peers is critical....I demonstrate. I work alongside them. I follow through, and I am there every day. Some people are fearful of

> change. You learn to judge people, go slowly. If they have never done activities before, they don't think learning by students is going on, but once it gets going, the teacher sees learning going on....The teachers talk to each other, share results.
>
> "They become convinced. I will start with one or two centres instead of several. Go slow, work it through, and build from there."

The general feeling, as evidenced by the ES example, appears to be that, while there is overload and pressure, there is also support and progress. The Model appears to be quite well-known, as most of the people interviewed have been actively involved in its implementation.

Some notes of concern or caution about the system's approach were sounded. One principal thought that there was a very competent support staff in basic areas, including Environmental Studies, but that this was at some expense to aesthetics. Pressures were often self-inflicted in terms of high expectations, according to one teacher who also believed principals needed to protect teachers from undue outside pressures. After the Hall-Dennis report there was a resurgent clamour for order in the late 1970s, and the Model would serve this purpose if "they don't go too heavy in the theoretical", offered one principal. This same person observed that there had been a number of "end runs" in implementing the Model.

IV SOUTH SEPARATE

The Language-Immersion program from South Separate was identified by the Superintendent of Curriculum as a particularly successful example of implementation at the school level. In this sense, it is not representative of all innovations in the system. Moreover, because the Board's Curriculum Model provides only a "general" framework, the particular steps and techniques at the school level should not be interpreted as typical of the operation of the Model. Nonetheless, we were interested in analysing successful examples in order to obtain specific insights about the implementation processes at the school level and the relationship between schools and the external support and authority system.

A. Program Description: Language Immersion

The major references for this section are two systems documents entitled "Language Immersion" and "Beyond Language Immersion - Grade 2" of 30 and 34 pages respectively. In addition, handout material and interview data have been utilized.

The Language-Immersion handbook begins with the following statement:

> "Children learn to read by reading" is a familiar cliché, but what does it really mean? It means that children learn to read in exactly the same way that they learn to talk, by being immersed in language in meaningful situations which can then be directly related to print. The Language Immersion Approach addresses this philosophy.

On the introductory page, it is also stated that Language Immersion (LI) uses a wide variety of materials and language activities to immerse children in oral and written language in order to encourage them to be competent readers and writers from the beginning. It is said to focus on oral-language development through specific activities using literature and various books. Written aspects are to receive attention through activities and projects, such as the children's own books and dictated stories, charts, and sentence starters. It is further stated that reading and writing vocabulary is enriched by daily writing through the use of labels, word banks, displays of function words, theme word charts, and dictionaries. The first page concludes with the following message:

> There is a great deal of overlap among the various activities. No one activity focuses solely on one facet of learning without expanding and enriching the others. Oral language, reading, and writing activities are mutually supportive. It is a totally integrated program.

The classroom environment for LI has been delineated in terms of time, space, materials, and people and put into chart form. Other topics in the handbook include descriptions of components of the program, a list of tasks for the teacher to do before school starts, suggestions for using "Breakthough", resource materials, and aims and objectives for activity centres. A sample timetable for the second week of school and a sample outline of materials and methods for a phonics centre are also presented. Several pages are devoted to guidelines for preparing a timetable and arranging the classroom.

During interviews, the researchers were given copies of several handouts that had been used at language-immersion in-service sessions. Topics of these handouts are kinds of lessons, independent activities in Early Primary classes, learning by doing, September activities, basic skills, oral reading, easy readers, and planning. Further understanding of in-service activities can be gained by examining the topics of principals' in-service meetings in the spring of 1984. They were: change, stages of reading, components of a language-immersion program, the LI environment, curriculum in environmental studies, arts, and math., role of the principal, and teacher growth. It was emphasized in interviews that the LI program was not incorporated into a comprehensive, system document prior to implementation as are most new programs.

The history of the Language-Immersion program in South Separate has been outlined in a four-page system document dated May 16, 1985. The beginning of the program has been traced to a language-experience method of instruction used during the 1968-72 period. This was followed by a British Primary Project which was implemented in four schools by 1974 and continued to develop to the end of that decade. The LI program is considered to have started in the 1980-81 year. Events of that year and others to the present are reported as follows:

1980-81
- two LI schools in operation plus two new schools
- decision made by principal and teachers after a visit to one of the operating schools
- provision of related materials and workshops for teachers and principals

1981-82
- four new schools for a total of eight
- mutual decision by teachers and principal
- formation of an informal, after-school, teacher-support group
- emphasis on activity centres in all Grade 1 classrooms
- individual in-service to principals

1982-83
- nine new schools for a total of 17
- introduction of the name "Language Immersion"
- shared teacher-principal decision making
- formation of a LI Committee
- September 1983, publication of the first LI handbook
- more structured in-service training, including June meetings for people beginning the following fall
- decision to concentrate support resources at the Grade 1 level, with less assistance to Grades 2 and 3
- continued emphasis on learning centres in the classrooms

1983-84
- 11 new schools for a total of 28
- continued in-service for Grade 1 teachers and principals
- introduction of Bridge Reading Kit and a system of lending materials for individualized reading and integrated themes
- in-service for Grade 2 and 3 teachers and provision of guides in order to extend the program
- specific in-service for principals new to LI and for all principals regarding evaluation in an activity classroom

1984-85
- five new schools for a total of 32 (one closed)
- refinement of handbook and support materials
- superintendents' decision and announcement that all Grade 1 classrooms would eventually be on an LI program and no new basal readers would be purchased
- extended in-service and support to Grade 2 and 3 teachers
- arrangements for principals in non-immersion schools to visit immersion schools

Fall 1985
- six new schools plus the English half of three French-Immersion classes
- plans for seven schools were not yet final on May 16, 1985

The LI program evolved over a period of 17 years, and during the last seven years activities have been integrated and supported by the Primary Co-ordinator with the assistance of the Primary Consultant. The program was being further developed at the time of this study. It is interesting to note that the term "Language Immersion" was introduced in the third year of implementation (1982-83) and an official announcement that it was to be implemented in all Grade 1 classrooms was not made until 1984-85.

B. Implementation

The four schools were from the jurisdiction of the one area which is located in a relatively new part of the city. The schools were chosen to provide a variation in dates of adoption of the Language-Immersion program with School One having become an immersion school in 1980, School Two in 1982, School Three in 1983, and School Four on a partial basis in 1985.

School One. The Principal of this school had been in a principalship, his first, for about three years. In commenting on the use of LI program in the system, he observed that it was started in Grade 1 but phased out towards the end of the Primary level when students required more structure. He observed that teachers and principals could choose different materials and approaches and that even "Breakthrough" could be used or not, depending upon the needs of the students. As far as use in the particular school was concerned, he said that when he came to the school there was one teacher into the LI program and that now a Grade 2-3 teacher was using it. As he recalled, the LI program had started in the system about 15 years before with a British Primary project, which he considered a "free for all." He said that the system had established a committee and, on the basis of feedback from teachers, had established a system approach and a series of related workshops. He stated that he requested the superintendent to provide his school with a LI teacher for Grades 2-3 and he had a choice of one from three names that were submitted to him. He said that he had been anxious for the program to continue into Grades 2-3 so that there would be continuity for the Grade 1 graduates. The new teacher, he reported, had had in-service training the prior spring and received support from central office people during the first year of implementation. This Principal was of the view that the LI approach required the use of activity centres and a rotation of students among them according to student needs. He observed that, prior to this, teachers had used more structured practices and that students spent most of their time at desks. He indicated that flexible grouping was a feature of the LI program and that the overall objective was to help students become independent learners within an acceptable framework. He added, "to me, immersion is everything going on in the classroom. It's integrated."

In relation to administrative support this principal said that he expected teachers to attend workshops and tie in with support people when it was required. He said that he visited classrooms every day and he let teachers know that he was behind them and would do everything possible to supply them with what they need. More specifically, he said that his input to the implementation of the Grade 2-3 program was to make sure that the teacher was able to attend the workshops. He provided some detail by saying that he would take over the class when the teacher needed to talk to a support person. He stated that this teacher who was new to the program was able to obtain help from the support staff, from the Grade 1 teacher, and from the area superintendent. He said that if he or a teacher had a question they would make an appointment for a support-staff person to come and visit them. He added that he attended workshops himself on occasion, and that sometimes teachers go out of town to workshops. He concluded, "I insist that my teachers, all of them, utilize resource people." Among factors affecting the implementation of the LI program, this principal indicated that the flexibility and enthusiasm of teachers was essential. The second factor that he mentioned was his feeling that the support people were "super".

He went on to say that the LI concept is a difficult one for teachers to learn if they have been used to a structured program. He said, however, that when the benefits to children can be seen, it is very convincing and it avoids a stereotyping of learners. He added that there should be a more systematic evaluation of the program in the future, but that at the moment there were absolutely no serious obstacles. When asked to comment about the future of the LI program in the system, this principal indicated that he felt that the monitoring and evaluation to date had been simply "watching kids". He said that the system was presently preparing a Primary-level document through a committee of about 20 people. He concluded by saying that he couldn't think of anything he would do differently regarding the LI approach. He said he had seen it grow in the system and that it was good.

It was possible to interview only one teacher in this school, as the second teacher was away ill on the day of the interviews. The teacher with whom we were able to discuss the program said that she was presently teaching Grade 1 and had 26 pupils in her classroom. Her personal experience with the program, she said, started eight years before, after she had visited some classrooms in which the British Primary Approach was being used. She said that she went from that experience to set up a single block of activity time in her classroom and that gradually she began to stretch the time and to feed other subjects into it. She was of the opinion that the terminology over the years had shifted from "British primary" to "activity centres" to "language immersion", and now she was using the term "thematic approach". She stated that language immersion and activity centres were used synonomously in the school system and that the general approach had been adopted by the system to meet the needs of children better. The history of implementation in that school, she felt, had been marked by various workshops over the years, and that some teachers had gone into the program by choice and others by force. Her feeling was that the language immersion was more than a curriculum change - "It's a philosophy, and I have no idea which of the above terms are correct." She was of the opinion that, in comparison with other teachers, her activity centres are set up for a shorter time-span and that her expectations are more structured.

In providing some detail of her individual use of the LI program this teacher outlined her basic approach as being thematic and based upon topics introduced by the students. She went on to say that she integrated all subject areas into a particular topic and that the whole idea was to immerse children in language. Her approach was also to have children express themselves without worrying about mistakes, to use an individualized program, and to consider the timetable as flexible. After outlining the essential components of her approach, this teacher stated the belief that no specific things were required for the LI program itself other than open-mindedness and a lot of common sense. She saw herself as a trial-and-error person and felt that her own desire for freedom had attracted her to the program as well. As she saw it, her approach to the LI program now was much the same as it had been during the past few years, but that the topics and the students had changed. When asked about the other teacher in the school who was just beginning to use the LI program, this teacher said that she had helped her a little bit at first but that she had not been called back. She suggested that this may have been because they were going different ways and had attached different meanings to the program.

According to this teacher, she had not received much administrative help initially until she felt comfortable enough to call for help. She added that, in all her years, no consultant had come to work with her in her classroom but they had called upon her to give workshops and to assist committees. She indicated that she had gone to conferences outside the school system. Her perception of the Principal was that he was really supportive and more than willing to order materials and assist in the classroom. Her belief was that the superintendents did not assist directly, but she commented, "I'm sure they are supportive." She went on to suggest that teachers fear being judged by co-ordinators and consultants so that the latter are not invited into this school very often. She also remarked, "It is very common for people in administration not to understand what you are talking about and doing."

The many labels attached to the LI program were considered by this teacher to be confusing, and she felt that this problem had created negative feelings among teachers and some parents. She speculated that "maybe the Board has been waiting for people to understand it before making it a requirement - they might have to wait forever." A second major factor, according to this teacher, was the difficulty that teachers have in keeping tabs on what's going on - on what the kids are doing. She stated that we have let the kids go but still maintain control. She felt that this situation led parents to wonder if the kids were playing too much. She indicated that she solved this difficulty by having a parents' night early each fall so that she could explain the program. In further considering factors that might have affected the implementation of the LI program, it was suggested that the change was not drastic and that teachers had simply to modify many things that they were already doing. It was also felt that the spread of information from teacher to teacher was an important factor in dissemination. She said that there are problems in relation to discipline and children chatting too much and that the program overall is very demanding but rewarding.

In summary, this teacher said that she had no concerns about the way the LI program was going in her classroom. She had not felt any pressure in relation to the program, although she had had to explain her reasons for doing certain things. Her feeling was that the questions had been asked out of curiosity and the desire for understanding - not to create difficulty. When asked if she would continue to use the LI program, she said emphatically, "Oh, yes, absolutely - at any age level." She added, however, that other teachers in the school are comfortable where they are now and that perhaps they lack confidence and fear confusion.

Examination of interview data for School One indicates that the one teacher had used the LI approach, under various titles, for several years, but that the program had not been implemented by other teachers until the current school year, after the principal had asked for a Grade 2-3 teacher who would be willing to do so. The Grade 1 teacher herself conducted workshops outside the school related to the LI approach, but her interaction with the new Grade 2-3 teacher was limited. Another unusual aspect of the situation in School One was that consultants had not been involved in assisting the Grade 1 teacher in her classroom. Implementation had not been undertaken until the Principal and teacher were willing and comfortable with the idea.

School Two. The Principal of this school indicated that she had been involved in the LI program for 9 to 10 years and during that time she had worked closely with the primary co-ordinator and other support staff. She pointed out that it was not like the old curriculum where a committee wrote a document and gave it to the principal for implementation with the staff. She said that when she came to the school three years earlier, she realized that the teachers were traditional and yet they were keen observers of students. She felt this would be the key to the new LI program that she wanted to implement. She reported that Grades 1, 2, and 3 in that school are all in their third year of use of the LI program. She stated that such resource materials as "Breakthrough" and "Chime In" were used as an integral part of the program.

This principal provided considerable detail about the process of implementation of LI in the school. She believed that when she came to this school the primary division was fragmented, with only one teacher trying LI and experiencing a good deal of negative peer pressure. She went on to report that she made it clear to the teachers that her long-term goal was to go in the direction of the LI program. At that point she said she had made it open for them to go to another school if they did not want to become involved. She stated that three teachers did transfer out, one took a maternity leave, and she asked one to leave, with the result that the whole staff of the Primary division was new to the school. In June of her first year in the school, the Principal arranged a professional-development day on the LI program. She made it clear that she required attendance and that it was not a requirement of the system. She felt that the new staff members who attended the workshop had a positive reaction to it. She said that she assured the teachers that they could go slowly and become comfortable with the program. As she saw it, all four were at different stages but that all Primary division members provided peer support for one another.

In relation to administrative help, the Principal indicated that all kinds of activities were prepared for students at various levels of difficulty and that, in this process, the librarian provided considerable assistance. She also indicated that the materials provided were really quite impressive and served the purpose. She believed, as well, that the Board and support staff assisted the teachers in significant ways. Her feeling was that the principal has to know what is going on in the program and where each individual teacher is going with it. She saw this as necessary information in order to be able to explain the program to parents. She went on to say, "The principal does not belong in the office. I'm in classrooms most days hearing kids read and observing the progress of the program." She went on to say that the support provided by the central office staff member was also important, as they were in the school every one to two weeks in order to exchange ideas with teachers and to provide the necessary materials. She stated that the principal and the area superintendents do evaluations. It was her opinion that the area superintendent is very aware of the program and takes time to visit classrooms in order to see students at work.

When asked about factors affecting the program the Principal indicated that it took some time in order to explain the program to parents, as most of them expected "ditto sheets" and phonics. She stated that, in this work and in other areas, there had been a high level of support from the central office staff and that system workshops had also been found useful. She emphasized the importance of dialogue among all concerned. She indicated, too, that the staff needs a lot of positive reinforcement and that the change "doesn't happen overnight".

In summary, this principal reported that she monitored the program in the school by observing students and examining the records that teachers keep for each student. She said that she shares this responsibility with the central office support staff and area superintendent. She said that she had found a lot of success with the program and "I would say we are doing pretty well." She added that they did need more resources for students with higher levels of ability and that "it is not a program for a lazy teacher." She believed that none of her teachers would go back to what they were doing previously. She went on to say that it was strictly a school program - something that they had done together - and that the staff had "bought into" the program because they had had something to say about the decision.

The Grade 1 teacher in this school said that she was teaching 22 students with the use of "Breakthrough" and the sketchy manual that accompanied it. She indicated that teachers do what is comfortable for them. In relation to the history of this innovation she said that the LI program lends itself to all socio-economic areas of the city. She said that she had had some early experience with the program but had started it officially in her classroom last year. The in-service meetings, the preceding June, and a classroom visit had been found useful. In elaborating further, she stated, "To me, immersion means to put a person into something. It's immersion all day in order to build more independence and confidence in students." She added that the program permeates the whole day, as there is really no set time for the language arts program. The language, in her view, comes from the students and it is built into the program on that basis. She indicated that her students needed more input from her than was the case with her class the year before. She confirmed that her attendance at the original workshops had been voluntary and that in this second year she was receiving about the same level of assistance from support staff as she had received the preceding year. She indicated that support people had been in the school for a half day every two weeks and that if she wished she could have time allotted when she could speak individually to them. In this way, she believed that a network had been established. The principal is quite necessary, according to this teacher, in order to provide "pats on the back", and this is possible because she visits the classrooms and can see the children learning. The Principal's role in obtaining necessary materials was also pointed out. This teacher appeared to be pleased that she had been asked to help the new Grade 1 teacher with the program. She said that the support that she had received was really quite satisfactory as a high level of trust had been established. A major factor affecting the program, in the opinion of this teacher, was that the teacher had five and one-half hours of solid contact with students each day. She also expressed pleasure that the system had trusted her to implement the program. Her overall feeling was that she was a good teacher who did her job. She added that she appreciated the flexibility the program provided for both teacher and students. She indicated that she had experienced no monitoring of the program by people outside of herself, nor was there any administrative pressure. When asked about the continuation of the program, she indicated that she would never lose or drop the techniques and methods that she had acquired.

A second teacher in this school had a Grade 2-3 classroom with 24 students. She reported that she had had previous experience in a Special Education position with emphasis on reading. She, too, was using the "Breakthrough" materials, and her students were given sentence-builders and folders. She observed that the program was linguistic, not phonetic, and that decoding was done by the Cloze method. She stated that she did not make language experience charts in groups as she did with the younger children. Her observation was that the main reason for adoption in the system was to get children to read and write with success from Day One. Regarding her individual understanding of the program, she said that it touches on language across the curriculum although it is not called that. She believed that the main difference from the old program was that the children were engaged in writing from Day One. Her belief was that nothing specific was required for the LI program except to encourage students to read and to write. She added that she felt very free to do whatever the students needed and to structure the program according to students' needs. She said that the contacts with students and the students' wider choice of books and materials were at the centre of the program. She also said that students do more checking of their work in order to develop increased responsibility and freedom. In relation to administrative assistance, she said that the program had been eased into the school and that she had asked the principal if she had any objections to her using the LI program in the school. The Principal had replied, "No, go ahead." She reported that she had had one-to-one in-service meetings with support staff from the central office during her first year and a workshop during the preceding spring. She confirmed that every two weeks a support person came into the classroom during the first year, but only on request during the second year. With regard to the Principal she offered that the Principal was very supportive and a "great plus" in the school. She went on to say that the Principal provided support by obtaining materials and giving verbal encouragement to both students and teachers. The result, in the view of this teacher, was that "we teachers get a happy face." The first major factor mentioned by this teacher was that the program meant much more work for the teacher. She said that she had been up late many nights, but that success depends upon preparation time so that time is a major factor, as is support. In fact, she stated that time was the biggest obstacle to the program. She added that she now could see value in testing, as it was a guide to planning for learning and that the results with children had "won me over". This teacher also indicated that there had been no official monitoring nor administrative pressure regarding this program, although the superintendent did visit her classroom and the students guided him around.

In summary, the LI program in School Two was in its third year of implementation. The Principal reported that she strongly advocated the program, although one teacher said that she had initiated the idea and asked the Principal if there were objections. Both teachers commented very favourably regarding the active support of both the Principal and consultant at the classroom level. The teachers also observed that there had not been monitoring nor administrative pressure. The data appear to be conflicting in relation to the Principal expecting implementation and yet the teachers not feeling pressure. The explanation might be that time, support, and dialogue enabled the teachers to gain a sense of ownership.

School Three. The Principal had been a principal for five years and was a recognized leader in integrating retarded students into the regular school program. He indicated that the emphasis in the school was on students, not content, and that they were building on success. The history of the Language-Immersion program in this school was traced by this principal with reference to 13 Grade 2 students who were not able to read and were then referred to a consultant. The consultant suggested that the "Breakthrough" materials be used with these students and she offered to work with teachers in that regard. According to what the Principal said, the program started in January 1983 and by February there were impressive results. The Principal said that by May he was so convinced that he decided unilaterally on LI for the school. He presented his views to the teachers and one Grade 1 teacher decided to move from Kindergarten in order to be a part of the change, whereas another teacher left Grade 1 for Grade 2 because she felt that the change would not be right for her. The two teachers, in preparation for the program, went to visit a classroom where the program had been implemented and they apparently were overwhelmed by it. The Principal said that at this point he reminded them that they wouldn't be able to do it all at once. The result was that in 1983-84 the program was started in two Grade 1 classrooms and in 1984-85 it was expanded to Grade 2 and a Grade 2-3 classroom. Plans were that in September 1985 it would be in every Grade 1 to 3 classroom.

In the area of administrative help, the Principal reported that teachers in the school were organized into grade teams that had weekly meetings with a teacher leader. He stated that one of the first changes he made when he went to the school was to have teachers construct a team timetable so that they would have time to talk together. He believes that the principal's role is to support teachers and at the same time to be a change agent and a buffer with respect to outside pressures. He added that the school has a parent volunteer program, as well as a program involving grandparents. This principal offered the comment that the Ministry has to do more than send "stuff" out and that there is a continual struggle in philosophy between the basics and the new programs, such as Language Immersion. He felt that the overall philosophy in their school was to "give it a try".

Time and materials were major factors affecting the implementation of the LI program in the view of this principal. He felt that some evaluation had been carried out by testing the LI program against an alternative program and that LI had been found superior. His view was that the Board at the present time was tied up with the "extension of funding" question and that the Roman Catholic schools were second-class in terms of facilities and support compared to the public schools. He believed that the Director gave people a lot of freedom and that there was a good deal going on in the system which had a dynamic Board. He added that his school received many positive strokes for their work in the integration of retarded students. With regard to the future of the LI program he stated, "It's the most exciting thing I've seen in education."

The two teachers in this school team up with one another, as they are in a double classroom with a total of 48 students. The first teacher indicated that she heard of LI at a workshop in May 1983 and that she had implemented the program that fall. She added that the Principal had suggested that she attend the workshop. In further discussing her individual use of the program, she reported that she was currently in her second year of the program and that the weekly meetings of teachers where they share ideas and materials, usually at lunch hour, were important to her. In reflecting upon her initial use of the program, she added that after the first workshop she had an opportunity to visit a classroom, and that in May and June a support staff person had come in to talk with them. She said that when she started the program in September she was struggling with it, but that support was there and she "stuck by it". She went on to say that by early November she was beginning to see some results from students and she began to believe in it. During this time she had found the Principal very supportive, and he had made it clear that the program was a priority in the school in terms of getting materials. She felt, however, that there was no pressure regarding deadlines for the program. This approach, she felt, "made you want to do more". This teacher also appreciated the help of the support staff in the early stages, particularly when the consultant said that other teachers had also had doubts in the early phases. The consultant came into the classroom weekly to work with students and to talk over the program with the teacher. The teacher added that she usually knew when the consultant was coming. In addition to ordering materials, this teacher reported that the Principal also came into the classroom and regularly had students go to the office to share their work with him. Major factors, in the experience of this teacher, had been the additional workload that the LI program puts upon teachers and the enormous responsibility that she felt to know that students were learning. She had found that parent volunteers had provided assistance for her and that the workshops had been a major factor in her preparation for the program. She suggested that more workshops at the system level would be useful. Overall, she indicated that the program results in students feeling very good about themselves and that she really likes it. In her view, the program is on solid footing.

The second teacher in this school said that over the years she had heard of the British Primary program and of such materials as "Breakthrough". She had begun to think that there might be a better way and that she needed a professional challenge, so she decided to move from Kindergarten to Grade 1.

She stated that she appreciated being able to start the LI program step-by-step. She elaborated by indicating that the "Chime" series provided a useful starting point in having students work at activity centres. She reflected that it was something that she had always wanted to do, yet she said that, in the early stages, she would swing from believing in the program to not believing in it. She reported a general feeling among teachers in the school that there was only one way to make it work and that was to work at it together. The administrative support she received was from the Principal who was very, very eager and very supportive regarding materials, arranging time, and providing encouragement and praise. As this teacher recalled, the consultant would say, "I know what you're going through. Hang in there...." This teacher thought that the consultant had come two to three times a month and that she enjoyed coming to the school. She recalled that the superintendent came to the school around three to four times a year and that he would stop and ask teachers about the new program.

Factors that influenced this teacher in the implementation of the program included the support from other teachers and the Principal. She said that some materials arrived late and that some had been prepared in central office. Another significant event, in the view of this teacher, was the meeting with parents where the consultant explained the program to parents. The teacher said that she and her colleagues had not really felt ready to sell the new program. The parent volunteers were also considered to be an asset to implementation. This teacher observed that she was trying to feel confident that students were learning and that this uncertainty had also been a major factor during implementation. She added, "You don't feel as if you're teaching, yet it is very demanding, as the kids are always at you." She concluded by saying that the program was now expanding into Grade 2 and that it probably would go into Grade 3 the next year.

In School Three, the LI program began as a solution for a group of students who were having difficulty. Although the principal strongly advocated the program, teachers had an opportunity to visit classrooms where the program was in use, to discuss it with other teachers and consultants, to take small steps, and to begin in the spirit of "giving it a try." The consultants' support in terms of "I know what you're going through," as well as regular visits to classrooms, was reported to have been particularly important to the teachers.

School Four. The Principal said at the beginning of the interview that language immersion in this school was in the early stages, as it was the first year for two Grade 1 teachers. He said that he had negotiated with these teachers and that their decision was that they would have until September 1986 to decide whether or not to proceed with full implementation. In providing more detail about the history of implementation in that particular school, the principal said that in the spring of 1984 teachers had come to him about students who were having difficulty learning. He said that he had suggested that they have a look at the program. After this, he said that teachers typically would try to individualize instruction and "nearly drove themselves crazy." At this point, the consultant and the Principal, according to his recollection, arranged for these teachers to visit some classrooms where a language-experience program was being used. After these visits, the teachers agreed to try a language-immersion program in the fall of 1984. As the Principal saw it, there were levels of learning for teachers as well, and that teacher needs had to be met on an individual basis in terms of where they are and where they are going. The Principal stated that principals have a lot of discretionary power and that there is a certain amount of information shared at principals' meetings once per month. He emphasized the importance of considering the school context in making program decisions. In relation to administrative help, the Principal stated that he had been honest with his teachers by saying, "I'm not going to force you - you have a year to decide." He added that because of his background in England his heart was in the Language-Immersion program and that he could justify it to parents because, in his view, it is better for kids. He added that he would back off, however, if teachers really opposed it. He observed that he did not gain very much from the in-service sessions for principals because he already had background in the approach. In the opinion of this principal, the factors affecting the program were related to teachers feeling threatened and the need to have teachers believe in the program if they are to be committed and overcome the feeling of threat. He was of the opinion that it is good teachers who make the program work, although central office personnel certainly believe in it. He said that there are often too many changes that come down upon the schools for political reasons. His final comment in regard to factors, was that programs are affected very much by personnel and that a program in a school may shift when a new principal with different priorities comes along. In considering the system overall this principal commented, "I duck some things." He added that he thought the LI program was on solid footing but cautioned that he thought some people were in it without believing in it and that some principals were in it for purposes of their careers. He predicted that 30 per cent of the people might drop the program if it became unfashionable.

The two teachers in this school were in their first year of implementation of the LI program. The first teacher reported that she and another teacher had attended a weekend workshop and had overheard other teachers talking about "Breakthrough". After this, she asked the Principal if he could arrange for her to visit a classroom that June; that had been arranged. She felt that the teachers in the classroom were excellent and that she had been given many ideas. She was made to realize at this point that she would have to go through the program step by step, as the program entailed a definite change in materials, methods, and beliefs. She added, "It's hard -- it's like changing your faith." The change that she was referring to was the change from a basal-reader approach to one of using activity centres. She indicated that it was up to the teachers to decide what applies to them and their situation and that she had yet to be convinced. She indicated that she had received administrative help from the consultant who came around every two weeks with ideas and materials. She felt that the Principal had also been "great". Professional development days, workshops, and regular brainstorming with other teachers during lunch hours were important factors in the view of this teacher. She went on to say that the superintendent had visited three times during the year and that he had met each of these teachers individually in order to get acquainted. She added that superintendents are often seen at workshops but that she hadn't talked to her superintendent specifically about Language Immersion. Factors which affected this teacher included a concern that she had about educating parents. The support she received from consultants was considered to be very good, and she was pleased with the assistance she was receiving from a parent volunteer and a high school student. She said she was also pleased with the fact that she was encouraged to use the LI program in different ways. In summary, she commented, "I'm not sure I need more help - it's me."

The second teacher in this school was teaching a Grade 2-3 classroom with 24 pupils. She said that she would be fully into the Language-Immersion program the next year, although then she was doing activities towards it. She recalled that the program started with some teachers and some consultants coming into the school for meetings. At these meetings she heard people using words like

"Chime" and "Breakthrough" that she did not know and so she decided to do something about it. She said that in the spring of 1984 she had visited two classrooms that had been suggested to her by the consultant. She said that at this stage she lacked confidence and appreciated the chance to talk to teachers and to see skills being learned by the students. She said she came to realize that the new program was not so far removed from what she had been doing. The administrative support was acknowledged by this teacher as she recalled that she had been encouraged to go into the new program step by step. She went on to say that the principal had provided assurance and was very helpful in obtaining the necessary resources and materials. She reported as well that the consultants were very helpful and that if you needed them they would be there. The important factors in the view of this teacher were that the new program entailed much more work for teachers and that there was always a shortage of time to prepare materials. She pointed out, at the same time, that the new program was motivating and that teachers work together in order to pool ideas and to help each other along. She stated that getting money was always a problem in order to support the program and that the central office needed to improve its loan system for the sharing of materials. She indicated that she had had doubts about kids moving around the classroom so much and that she had a need to feel that she was getting somewhere. Her overall comment was "I'm enjoying it."

School Four was in its first year of partial use of the LI program. As with School Three, the start was made as a means of problem solving for students who were experiencing difficulty. The Principal strongly supported the LI but would not impose it on teachers. Rather, he led the teachers to consider it in relation to problems by arranging classroom visits and interaction with consultants. He negotiated with teachers to try it and not make a final decision until after two years of use. Again, support staff were viewed as being essential to implementation as they visited every two weeks with ideas and materials to share.

Views of the System's Approach

The following remark by one principal, seems to reflect the general feeling among the teachers and principals interviewed: "It's not a program for a lazy teacher, but none of my teachers would go back to what they were doing previously. This is strictly a school thing, done together. Staff buy in because they have something to say about the decision." All four principals had positive comments about the system's approach, but three added concerns related to a perceived need for more monitoring and evaluation, for additonal resources, and for increased understanding of, and belief in, the program. The teachers confirmed the views of principals by saying that they were not aware of monitoring and had not felt pressure related to timelines. Teachers appreciated the approach of the system in terms of visits to other schools and classrooms, in-service training, support staff, interaction patterns, and being able to ease into the program. The concerns they expressed were related to lack of clarity of meaning of the program, required changes in beliefs, materials, and methods, and lack of evidence that children were learning. Several teachers observed that in early stages of implementation they had doubts that the support they required was there.

In three of the four schools, the consultant was seen to have played a vital role in the implementation of the LI program. Typically, the consultants arranged classroom visits, provided in-service training, and interacted with teachers as they prepared to implement the program. During implementation, they are reported to have visited classrooms regularly to do demonstration teaching, make materials available, and to interact with teachers about LI itself and also about the process of change. Their understanding of teachers' doubts and the reassurance they provided were considered to be very influential. Consultants also spoke to parent groups. In the fourth school, the consultant was not required on a regular basis, because the teacher herself acted in a consultative capacity to other groups.

The processes reported in the interviews with teachers and principals are related to the implementation phase of the Model. They appear to be consistent with the intent of the Model and with the principles and practices that have evolved in the school system over the past few years.

We now return to the larger picture in the final two chapters. In chapter 8 we report on the effectiveness and impact of the models as a whole. In chapter 9 we take up the four cases in relation to the theory and practice of planned change.

CHAPTER 8 EFFECTIVENESS AND IMPACT OF THE MODELS

We did not set out to evaluate and compare the four models. We were interested in what relative progress was being made on the improvement of procedures for curriculum implementation. There are many different levels on which one could assess the implications of the models. One which we do not take up in this chapter, but which is considered in chapter 9, is the "lessons for planning for implementation" for school boards. In this chapter we discuss issues related to the effects of the models in the four systems. Effects to be discussed include:

- the extent and quality of implementation of the Model (is it really being used with commitment and skill?);
- the impact on the attitudes and professional skills of individuals (teachers, principals, consultants, superintendents) with respect to the management of change;
- the impact on the capacity of the system to manage change;
- impact on student learning (mostly indirect comments).

Outcome data came from three sources. The main source was the set of interviews. We asked those interviewed what specific "indicators" of success or failure they use and point to as measures of the effectiveness of the system's approach. Comments about effectiveness were also made in other parts of the interview and were used to arrive at an overall picture as perceived by system personnel. Second, the consultants' survey elicited views on a number of outcomes. Third, we drew on internal documents, such as Task Force reports and program evaluation reports. As before, we present these findings by Board. We should also note that the earlier chapters in this report contain evidence related to the effectiveness of the models.

I EAST COUNTY

Most of the respondents reported that the model itself was definitely being put into practice by more and more people, and that there was clear progress as it both spread and became embedded more deeply in the procedures of the system. Most stated that the use of the Model was benefitting the system, including the administrators, teachers, and students. We asked those interviewed to describe the indicators that they saw as evidence for these claims.

Superintendents reported as follows:

> "I feel that we are fairly well down the road. We are fairly well advanced in a lot of our processes. I travel around the province a fair amount and I think that's a fair statement of where our board is in comparison to others....On our Program Scale, we have a lot of programs at the refined level now, though not too many at the integrated level."

> "The indicators of success? Are the core aspects being incorporated? Looking for principals' information that he has available, such as a copy of the plan, the dates of visits, student performance, sample units from teachers. I look for specifics, for activities.... Principal use of time would be another indicator. How much time is spent on teacher evaluation? What activities? How much follow-up? What professional development emphasis is the school involved in? Which schools were asking for reprints from the library?"

> "The math K - 8 program. We are gathering new data. We will have data from five years ago, three years ago, and now. We are building a performance-monitoring system. It may tell us something in our Grade 5

> program should be in Grade 4 or in Grade 6, and we should be able to improve program delivery because of the longitudinal monitoring we are doing. The interviews with teachers and performance tests. We look for individualization in the classroom and for an emphasis on problem-solving and thinking skills....We have noticed in these interviews much more awareness on the part of teachers and much more explicitness about what it is they are doing and why."

> "On the formal-realm student results. We have, or are developing, tests which measure this. Sometimes we look at levels of use to measure implementation. Informal indicators are the hive of activity - the meetings of teachers, drawing on our resource centre, materials generation. The co-ordinators give feedback as well. A host of checks and balances....We use evaluation process very formally and very openly to the Board and back to the school."

> "A final step in the in-school process, once the program is implemented and you are evaluating student performance relative to those objectives, is to be sure that the test items have to be appropriate to the objectives. That's what we are moving towards in East County. For example, the Grade 4 math. We hope to provide schools with valid test items keyed to program objectives. These test items might be included with teacher test items, but the results would be sent back to central."

Co-ordinators and support staff said much the same. One co-ordinator stated the progress in a kind of backhanded way:

> "There has been significant achievement at the school level which could be said as Principals would not deny that they have a program responsibility."

And others:

> "The review stage is where there is a real impact. There is no doubt that the system has an improved capacity to solve problems at this point....We have special programs out there that fit the outcomes. It's all integrated. One might see integration as an aspect of institutionalization. There are multiple supports for continuation of programs."

> "Where is the system heading? We have a very good process. We just need to get better at using it, to move closer to the ideal process we have set for ourselves. That's the major goal. Five years will accomplish a lot. There is some awareness of clarity

right now, and we will increase the percentage of teachers who are involved, but it's not really fully accomplished. Principals are operating at Level 3 now. The number of principals operating at Level 4 will increase dramatically in the next five years."

"I look for things I didn't see five years ago. For example, I look for teachers with goals. When I see a well-planned, goal-based program that they can be articulate about, I'm seeing change....I see a lot more of that now. I also look for things being internalized. For example, if I hear a principal saying, "why this kid hasn't even been tested yet," I know that change has happened, because now the principal is thinking about testing as a natural thing to do and the ideal thing to do. It didn't used to be that way....I also look for some level of consistency across superintendencies....I think we have moved some distance in achieving consistency across the board."

"I can tell it is working well by the repeat turn-out of teachers involved in development, and also they bring in samples of what they have been working on for sharing and discussion with the other teachers. We have very few dropouts as we go, even though they are evening sessions. And they are sharing. They are sharing in the development. I think it is the support. The fact that they are not being left alone to implement to the best of their ability....I see teachers starting to get in touch with each other. Teachers are calling and telling me, they are not waiting for me to do the communication."

"I think one of the things we have done is to use effective research-based strategies for affecting change....Planned-change theory and techniques played a role. For example, there is a common curriculum language that we built, so that everyone understands pretty well what each other is talking about. The programs are written in a common outcome-structure form....We field tested many formats and ended up with the one teachers liked best and could understand best.

"Another lesson concerns money. We have been able to use the procedures to argue for budget. We have been able to institutionalize a regular budget. It used to be ad hoc. The trustees just accept it now. For example, our implementation budget for the ES Committee is now on white paper. It's not on green paper....It used to be, but in recent years that changed, I guess just because it came up so regularly over the years that people started thinking of it as a permanent area of operations. That's institutionalization....Most of that money is spent on supply teachers, buying of materials, and printing of programs."

> "Because of the success of the evaluation process, it is becoming clearer, more trusted; and people have more confidence. It is another example of how things are coming together. I am very optimistic when I look back five years. I feel very positive of the direction. I guess we are reaping the benefits of things that were planted 10 years ago with learning outcomes, or five years ago."

In the survey data, eight of the nine consultants indicated that the system's approach to curriculum implementation was "very effective" or "moderately effective" (on a four-point scale). Only one consultant said it was "mildly effective", none said "not very effective". The same number agreed that the system's approach had "resulted in the professional growth and development of teachers", and that it "has had a positive impact on teacher-principal interaction" and on "the interaction of school and central office personnel."

What then, can we say about the overall effectiveness of the East County Model? Basically, we think it is too early to be definitive, but there is a number of very positive interim indicators: comprehensive procedures are in place; virtually everyone we interviewed could describe the procedures and was clear about expectations; most of those interviewed were detailed in describing how the procedures were followed; most again pointed to a number of specific benefits of the model compared to the situation five years ago; a complex program in Environmental Studies was started from scratch and has achieved a high level of implementation among 40 per cent of the eligible teachers. Other reviews in math and Special Education describe additional accomplishments. Above all, highly committed curricular leadership is being increased at all levels (vice-principals, principals, department heads, consultants, superintendents, the Director), which has already reached a critical mass, and which is increased with each new appointment. The message and practice are clear: if you want to be promoted in this system, you have to have already demonstrated program leadership and be committed to, and skilled in, program-implementation procedures.

There are three reasons why we think it is too early to draw firm conclusions. First, the full-blown model was developed piece by piece over the last 10 years so that it has only been in operation in a reasonably complete way over the past three years or so (it is still not complete). For example, the role of the principal has only been attended to in an intensive way since 1983. And the procedures have been used until very recently mostly at the elementary level, not at the secondary level. Second, more work needs to be done on developing and integrating measures of student achievement into the basic procedures - a task which is receiving priority at the present time. Even here, however, considerable progress on student achievement has been made. The model itself (chapter 2) starts with and focuses on "learning outcomes". This explicit focus is part and parcel of the model at all stages. In reviewing the case draft our liaison contact person had this to say:

> "The process of developing agreement on the 'outcomes' for students in programs brought a clarity in learning directions which were not present before. Consequently, when teachers are "implementing the program at a very high level", the assessment, by East County definition, means that they can now demonstrate

> student-learning growth on a defensible growth scheme. These new capacities for teachers impact directly upon their students.
>
> "The 'high level' of implementation term has another implication, that teachers are also pursuing a higher quality of outcomes, identified in East County as major sets of skills (called complex skills), such as various types of inquiry, problem-solving, etc. Because the intention is to expect each student to perform the whole skill as an integrated act, conventional standardized testing is inadequate by itself, except to test the subsets of the skill. The significant whole skill can be measured best in the classroom context in which it can be observed to be performed consistently a number of times. A good example is "process writing". East County support staff and teachers are identifying the growth schemes in complex skills from student data because there are no complete sources in the literature. Consequently, this is not simply the implementation of a written program, but a grounded-research approach.
>
> "In my dissertation, I identified this as a shift from a knowledge-oriented curriculum (student as an empty vessel) to an emphasis on skills which prepare the student to become a self-directed learner. The capacity of many more teachers to provide students with a higher quality of learning (by an East County rationale) is a consequence of the effects of the model which could be overlooked. This is not a case against using standardized testing to sample subskills, but the identification of a technical problem when attempting to avoid measuring something less and different from the outcomes being pursued. OAIP (Ontario Assessment Instrument Pool), for example, fails entirely in this area. Developing good standardized measures of complex subskills is a difficult task which few people appear to have done very well. That is one of the many obstacles that is being addressed currently."

The third aspect to be developed further is the continuation of adding program leaders in positions of authority, especially at the school level (e.g., department heads, vice-principals, principals) as positions become available. Because, as in most Ontario systems, there will be a number of retirements over the next 5 to 10 years, and because the system has such explicit program-related hiring criteria and procedures, we can expect the already strong leadership to be strengthened in much more powerful ways, as the whole system will be working in a mutual reinforcing direction.

II REGION NORTH

In presenting our "outcome" data, it is important to note that at the time of our study, the school system was engaged in a serious re-examination of the assumptions, procedures, and impact of the established curriculum-development approach to implementation. The review was undertaken in response to widespread dissatisfaction with certain aspects of the existing process. As a result, there is a lot of negative talk in our data. In our view, the messages conveyed in the system's self-criticism are themselves a kind of outcome, because they reflect in part what people in the system have learned about organizing and supporting the implementation of curriculum changes. We were impressed by the efforts being made in Region North to search for new ways to improve upon the old. We have grouped the kinds of outcomes mentioned in our data into four categories - null effects, positive outcomes, negative outcomes, and adaptive/reactive outcomes.

Null effects indicate results or outcomes which the official organizational approach to curriculum development and implementation was expected to produce, but did not, according to our interviews and the Region Curriculum Task Force reports. These are listed in table 8.1 more or less in sequence with the process. Of the items listed, one that deserves particular comment is the finding, in the Board, that the required involvement of teachers in developing their own curriculum did not result in widespread teacher-commitment to the products or their use. In the survey, a majority of the consultants rated the school system's approach to curriculum implementation as "mildly effective" to "not very effective", both in the system as a whole (78 per cent) and in their own area of program (65 per cent). Only four consultants (22 per cent) said the approach was "moderately effective", none said "very effective".

Table 8.1 Null Effects of the Official Approach to Curriculum Implementation

- Curriculum guidelines not consistently useful to teachers
- No clear understanding of expectations for implementation among school staff
- Little teacher ownership/commitment to curriculum and implementation
- School programs not uniformly high-quality
- Insufficient continuity in programs from school to school
- Insufficient staff-development support for initiation of implementation
- Little improvement in classroom programs and practice as a result of curriculum development
- No systematic revision of programs in place
- Little co-ordination in curriculum development, staff development, implementation, and supervision procedures/services

Positive outcomes here represent intended and valued results of the curriculum process. In our interviews, respondents consistently maintained that the participation of teachers in

Region and school-level curriculum-development work since the formation of the Curriculum Councils had yielded a significant number of teachers in the Region with expertise in curriculum development. While growth in local expertise has not offset the general dissatisfaction with school curriculum-writing requirements, it has resulted in the development of increasingly practical, useful curriculum guidelines in comparison to those produced after the curriculum process was first set up. One can reconcile the claim of increased expertise with the first set of findings in table 8.1, by noting that the expertise represents a potential not yet harnessed, because procedures are not yet in place that would co-ordinate the best use of these resources. In the consultants' survey, about half the consultants (40 per cent-55 per cent) agreed that experience with curriculum development in the Board has resulted in the professional growth and development of teachers, a positive impact on teacher-teacher interaction and a positive impact on the interaction of school and central office personnel. A third said it had a positive impact on teacher-principal interaction.

Negative outcomes are listed in table 8.2. These are results of the process which are currently regarded as undesirable by most of our sources. It is important to note that many of these outcomes are not caused solely by the organizational process for curriculum change. The lack of curriculum-development expertise on the part of many classroom teachers, for example, is not a result of the process, but certainly contributes to teacher frustration with curriculum-writing expectations. It is also worth noting that the individualization of curriculum efforts in each school was initially viewed as the most effective way to develop curriculum, but has come to be regarded (at least in the schools) as unnecessary and inefficient.

TABLE 8.2: Negative Outcomes of the Official Approach to Curriculum Implementation

- Innovation overload in schools
- Duplication of effort among schools
- Unequal workload from school to school
- Teacher/Principal dissatisfaction with curriculum-writing requirements
- Teacher/Principal dissatisfaction with Region curriculum guidelines
- Teacher use of curriculum guidelines from other Boards
- Overemphasis on curriculum development in system and schools
- Inattention to actual teaching of school programs
- Wide variation in timing and effectiveness of initiation in schools

The school system has not stood idly by in the face of the numerous null effects and negative outcomes resulting from the original process. Adaptive/reactive outcomes indicate actions that the school-system administration has taken in response to these unsatisfactory effects (table 8.3). Like negative outcomes, other factors may contribute to these effects. From our knowledge of this school system, for example, it is clear that the current understanding of implementation and the Board priority model for implementation have not simply evolved out of experience with the guideline process in the schools. A lot of new knowledge about what implementation is and how it could be supported has been actively sought from external sources, including the research literature on planned change and contacts with university consultants. Application of these new perspectives to the local situation enabled Region personnel to "see" what was missing from the established organizational approach. Some of these adaptive/reactive outcomes are controversial. Among some respondents, for example, the current latitude for curriculum-sharing among schools represents a violation of the long-standing tradition of grass roots curriculum development. The culminating outcome of the process, as represented in our data, is the decision on the part of the administration to set up the Curriculum Task Force "to review the curriculum process: development, implementation, review, and report with recommendations to the Administrative Council".

The organizational approach to curriculum implementation in the Region North Board was clearly in a state of transition at the time of our study. Data from our central office interviews provide the basis for several predictions. The recent emphasis on "implementation" will no doubt continue with increasing attention to curriculum use as opposed to curriculum development in the schools; more systematic in-service support for implementation, particularly during the initiation phase of change; more definite, but not unreasonable timelines for implementation; and continued efforts to clarify expectations of

TABLE 8.3: Adaptive/Reactive Outcomes of Official Approach to Curriculum Implementation

- Clarification/reduction in curriculum-writing expectations
- Encouragement for curriculum-sharing among schools
- Increased use of curriculum-writing task forces for in-service to support initiation
- Reduction in number of expectations affecting teachers
- Increased attention to curriculum leadership role of principals
- Experimentation with development/use of self-evaluation tools for school programs
- Initiation of central guideline review/revision procedures
- New understanding of implementation at the administration level
- Experimentation with alternative approach to curriculum implementation (Board priorities)
- Increased budget for implementation support
- Official re-examination of the curriculum-development and implementation process

staff in implementing curriculum changes. The practice of specifying discrepancies between existing programs and new initiatives will probably settle in at the central office and school levels, particularly in the context of guideline revisions. Although there are appeals from school staff for a change to standard curricula developed centrally under the direction of Board consultants or other experts, there was no administrative consensus as yet on what direction the system will eventually take on those issues. Central-office and school-level curriculum-development activities will continue, but not dominate the curriculum-improvement process as in the past. A need to clarify and perhaps restructure the linkages between program and staff supervision and implementation is recognized in the school system. Some structural reorganization at the central-office level will be necessary. A system-wide focus in school-program evaluation will probably take shape. The emphasis on curriculum leadership among principals will also continue, as will efforts to expand the functions of curriculum leadership to other change agents inside (e.g., lead teachers, teams) and outside the schools (e.g., consultants, school superintendents). The recent experiences with Board priorities have drawn attention to the value of limiting the number of expectations and of committing support over a longer term. Talk about reducing the number of initiatives for change affecting teachers is likely to continue. How this can be done actually, given the seemingly endless stream of Ministry curriculum initiatives, is unclear. At the elementary level, the focus will be mainly on review and refinement of programs in place. Because of O.S.I.S. there will be more new curriculum initiatives at the secondary school level. It is possible, but seems unlikely, that the Board priority and guideline approaches to change will persist as distinct alternatives. Some kind of amalgamated approach probably will be created.

Prior to the completion of this case study we received a copy of the Task Force's final report, which contained a set of proposed curriculum review, development, and implementation procedures. The proposal is based on an explicit conception of planned change as an incremental-growth process for persons in all affected roles, which occurs in manageable steps directed towards practices increasingly effective in achieving valued student outcomes. Growth results from the use of appropriate actions to overcome such obstacles as lack of knowledge/skill or incentives, lack of resources and organizational arrangements.

Space considerations permit only a summary review of the proposed process. First, it is intended to be generic, i.e., applicable (with allowance for modification) to any Board initiative, curriculum or otherwise. Second, the process calls for limiting the number of targets for improvement across the system, and "focusing a larger proportion of existing resources on few targets for longer periods of time." Third, the process stresses goal identification and role clarification, and is organized around a set of seven tasks: (1) identify the goals for change, (2) determine behaviours of staff and students sufficient to accomplish the goals, (3) identify manageable steps for students and staff to take towards such behaviours, (4) determine present behaviours of staff and students relevant to the goals, (5) diagnose obstacles, (6) develop/choose and apply strategies to overcome obstacles (to implementation), (7) monitor progress of students and staff.

The first three steps are to be carried out centrally by goal-identification teams and development teams under Planning and Development Division. The remaining steps are to be carried out by the actual staff involved in each change (e.g., teachers, principals, leads/heads, officials, consultants). For special projects, Regional implementation teams might be formed to plan for implementation for the system and to help initiate the plan. Specific timelines are proposed for each task. Indirectly, the process calls for a shift from school-based to a kind of centrally based curriculum development. According to the proposal, the procedures emphasize the teacher as "adapter, implementer, and reviewer of curriculum", but not as "prime developer" as in the past.

It is important to note that the process is not really new to the system. The development procedures (steps 1 to 3) have already been experimented with in developing program profiles and principals' profiles. The overall process simply mirrors and formalizes the "gap analysis" - planning procedures advocated throughout the system for some time.

A further observation that should be made about the Task Force recommendations, is that there is a lack of explicit attention to some of the obstacles associated with the established curriculum process. For example, school staff no longer would be writing courses of study, but they would be writing "implementation plans". It is not clear how the time and skill development required for this new task would be accomplished.

The proposal treats the consultants like any other role group. No major changes in the consultants' responsibilities are suggested. It is more a matter of making the consultants' expected contributions to implementation of specific projects more formally specified and accountable than is presently the case. If carried out, the school-level planning procedures would also have the effect of bringing the demand for consultant services more consistently to bear on system-implementation initiatives.

Whether or not the procedures proposed by the Curriculum Task Force get adopted and are effective in resolving the main problems was uncertain at the time of this writing, but it is clear that some change in the approach to implementation is in the offing. In chapter 9 we will have more to say about guidelines and lessons for improving curriculum implementation.

III WEST PUBLIC

Each of the 21 central office personnel was asked, at the end of the interview, for the overall outcomes of the Curriculum Model. Their remarks are summarized in table 8.4. In our view, the findings indicate that a priority for curriculum has been established in the system, and that, while considerable progress has been made, implementation of the curriculum model has been slow and difficult. It should be noted too that implementation is on a "broken front", in that some professional staff in some situations are at a high level of use while others are only aware of the developments. The justification for the statements above can be seen in the words of those interviewed.

TABLE 8.4: Curriculum-Implementation Outcomes

Progress	- We have come a long way - We are good at development
	- Given restraint, we are doing well
	- It is very solid in K-Primary - Junior level is on the way
	- Secondary has improved some
	- The Model is a catalyst - We have a standard format
	- There is more discussion - Some people are "with it"
	- Principals are creating a supportive climate
	- We will appoint principals with background in curriculum
	- The system is less sexist now
	- I have a positive feeling - I think it is very effective
	- I'm really pleased with it - I feel good about these developments.
Concerns	- It is a bigger job than we anticipated
	- Full implementation may take 10 years
	- We are at a "make or break" stage
	- Continuation of financial support
	- The computer program came "top down"
	- I'm cynical - do objectives make us better?
	- We have not prepared leaders at the secondary level
	- We should slow down pushing documents
	- We are not good at delivery or implementation
	- Some people are "out to lunch" - the community is demanding of teachers.

Superintendents

"Every job has turned out to be a bigger one than anticipated. We have a quality product yet it slows things down - maybe that's O.K. - striving for perfection."

"Leaders in secondary schools have been operational - not oriented toward curriculum, so they lack formal training in that area, yet they are interested in kids. We haven't done a good job to train these people for curriculum leadership."

"We've come a long way - as far as anyone in the province. The model is solid in K-Primary, and the Junior Division will be well on its way in another year."

"We're at the stage of taking the Model seriously. Principals and vice-principals finally believe that we mean what we say. We've had some bandwagon shots, but this is staying."

"I'm cynical about cycles of delivering curriculum - I've been around it five times. I'm not sure objectives make us better."

"Implementation is at a 'make or break' stage now. It is time to slow down the pushing of documents."

"There is some improvement in secondary schools in providing 'hands on' experiences for the general level, yet attitudinal change is the big thing - not just to pay lip-service."

"The curriculum plan is in the process of being completed. It is pretty well thought out. We are part way through the implementation process."

Supervisors

"We are good at development but not at delivery or implementation. The Model is a catalyst."

"I'm pessimistic about LOUs. Devising charts for a whole group is not productive, humane, nor realistic."

"I have a positive feeling about the model, but it will take a long time to come in."

"Given restraint, we are doing well. Sometimes teachers think that we don't understand them - that we don't care. That is my greatest concern."

"One difficulty is that, as curriculum has become a major aspect of our roles, the administrative tasks that are operational have not been removed."

"Curriculum implementation is being taken seriously with the message that implementation is the responsibility of the school. Schools can no longer neglect it out of senior administrative neglect."

Consultants

> "I don't know yet. I want to know that kids are being handled differently. Some people are with it and some are 'out to lunch'. The system is less sexist now."

> "Time is the key - good soup takes a long time. The timing for the LOUs is wrong."

> "We're in the middle of a big change. It looks complicated and it is thorough. The terminology is scary. Maybe we're falling down on follow-up."

> "It works fine if we take pressure off teachers and tell them just to do the best they can. Then they see it as realistic."

> "The word 'ownership' has been overused. They'll only feel ownership if it's good and they are not coerced. They will adapt it and get ownership that way."

> "I feel very good about these developments when teachers and principals become partners, the use of support personnel becomes integral - not just called out to solve problems or overcome a weakness."

> "I think it is very effective - I'm really pleased with it. We have to be careful not to push too much at once."

> "The only concern I have with the Model is the time it takes to go through all the stages and to get the curriculum into the hands of the teachers."

> "There is a proliferation of binders - that needs to slow down."

It is clear that the school system, during the past five years, has succeeded in making curriculum a priority among its professional staff. This emphasis has resulted in the detailed preparation of the middle two phases of a Curriculum Model which includes needs-assessment, design, development, implementation, and evaluation. The desire to build upon available expertise and to be thorough has resulted in a high level of sophistication in the printed material which includes levels-of-use charts, task-by-personnel matrices, and detailed role descriptions. It is recognized that the Model is complex, but it is hoped that time and support will overcome this potential problem. Plans are underway to develop the remaining two phases in a similar fashion.

Resources, both human and material, are being allocated to implementing the Model. System priorities, annually determined, are congruent with the Model, and lines of responsibility for area superintendents were made to include the Superintendent of Curriculum and Special Services, as well as the Superintendent of Operations. Decision-making processes and communication channels have been clearly determined. It has been said frequently that the model likely will be evolving continually so variations in the application of it, as in the Junior-level English program, are looked upon as alternatives to evaluate. Similarly, the predominant feeling is that people must be respected, so that a broken-front approach is being used with the hope of full implementation perhaps by the end of this decade. Variations between, and among, groups of superintendents, consultants, principals, and teachers are foreseen in terms of levels of use and differentiated professional-development activities.

Environmental Studies, the focal innovation, was being implemented as planned in the four schools visited. It should be pointed out, however, that teachers in three of the schools had been involved on writing teams, pilot testing, or field testing for the program, and people in the fourth school had volunteered to be involved but had had no response. As a result of early involvement, implementation of the one unit of the program was reported to be going smoothly. As reported earlier, consultants were actively involved in implementation of the ES program in only one of the schools; in another school informal contacts were made regularly; and in two of the schools support was derived from teams of teachers and a teacher-librarian. The Model was followed in terms of writing teams, piloting, field testing, system in-service training, and other activities at the system level. The timing in the Model for the introduction of levels-of-use charts to teachers and principals was found inappropriate. The consultant was very uncomfortable in giving charts to principals. In this area, the superintendent, who had been on the Committee that developed the Model and was on the ES Steering Committee, monitored principals and expected them to monitor and assist teachers. Two of the principals were involved directly at the classroom level, and the other two provided support, resources, and released-time for teachers. Variations among schools are accommodated in the Model, as each school is required to develop its own implementation plan within the guidelines provided. The school plan may or may not include the use of consultants. In summary, the Model was followed quite closely in the development and implementation of the ES program for the four schools in the sample.

The consultants officially report to the supervisor of their area and/or to the Superintendent of Curriculum and Special Services. The system is moving from subject-oriented, career appointments to generalist, term appointments, which they believe to be in keeping with curriculum developments. Within this framework, consultants vary considerably in how they spend their time, with some devoting virtually all of their time to writing curriculum, others being "on call" to schools, and some making their own visitation schedule. Consultants in such areas as music and physical education work primarily with rotary or itinerant teachers. It should be noted that supervisors are involved in staffing decisions but that consultants are not. Consultants, however, take seriously their responsibility for monitoring implementation, piloting, and field testing, and typically have systematic procedures in place. Several consultants stated that the support of supervisors and superintendents had been of major importance to them. Consultants do have concerns related to the need for more schooltime for in-service sessions, overloading of teachers, and perceived lack of communication between central office line personnel and professional staff in schools. A major difficulty arose in relation to the role of consultants in preparing and using levels-of-use charts with line administrators.

The contribution of the consultants is viewed as very important. Although most of the teachers interviewed had been involved in system-wide activities, they say that they call upon consultants when needed and receive prompt and appropriate assistance. Principals, too, recognize the support staff as very competent and vital to the work of schools.

The consultants' questionnaire provided some additional information in regard to outcomes. Fourteen of the 15 who responded believed that experience with curriculum implementation had resulted in the professional growth of teachers. Eleven noted a positive impact on teacher-teacher interaction. Views were divided almost evenly, however, in relation to whether there had been a positive impact on teacher-principal and school-central office interaction. When asked to rate the current approach to curriculum implementation in the whole system, one replied "very effective", seven said "moderately effective", three responded "mildly effective", and three thought that it was "not very effective". A related finding is that eight consultants thought that the Environmental Studies curriculum was being implemented "completely" in accordance with the Model, while other responses were "for the most part" - four, and "partially" - two. The most common reaction of consultants was that the model was being implemented with a beneficial effect on teacher-teacher interaction. While perceptions differed about the impact on vertical interactions, the approach generally was thought to be moderately effective.

This case study illustrates that, within a five-year period, a large school system can establish a clear priority for curriculum and make considerable progress in increasing support for implementation. It is not clear whether the momentum can be maintained or, perhaps more accurately, whether people experience a clear-enough sense of success and progress to conclude that the benefits outweigh the costs.

IV SOUTH SEPARATE

Each of the 15 central office staff members was asked, at the end of the interview, about the overall outcomes of the DIME Model for curriculum implementation. Their statements are tabulated and categorized in table 8.5. Three statements are of a general nature, eight are positive, and 12 reflect concerns. The most common view was that development had been done well, as had some implementation, but that wider implementation, and the maintenance and evaluation phases needed more work. In the case of the Language-Immersion program there was a strong support system. Concerns expressed were in relation to the number of changes underway in the system, difficulties in spreading the Model beyond the primary level, and the need for the monitoring and evaluation phases to receive increased attention.

Curriculum-Implementation Outcomes

Each of those interviewed was asked, as a summary of their views, to state the overall outcomes of the DIME Model for curriculum. The initial response to this question for each person is quoted below.

Superintendents

> "Despite great expense, it is hard to get any enthusiasm going. Moving the whole system is tough. It is easy to get good exposure for our programs, but not to get the whole system going."

"A notable failure is in the arts - a great program, but it didn't work even though it was developed to the individual lesson. Maybe teachers are frightened - not an uncommon problem."[12]

"DIME on paper always looks better. There are only so many thrusts you can handle at one time."

"I think it is a very effective way of curriculum implementation. An important word these days in our system is 'input'. In the past, there were things done to people. Now we are saying, before any change is made...you have to talk to parents and to teachers and get their support first."

"A lot is being attempted at the secondary level, but we don't have the structure to do it. For example, we don't have a philosophy of secondary education, or one that I agree with."

"Much remains to be done in terms of teacher effectiveness - plain, good classroom practices - getting away from lectures. Now principals are given a lead role and have separate in-service sessions."

Co-ordinators - Consultants

"The Director created the lines of authority, set the job descriptions, and that is all - it was left for wrangling and clarification. There is trouble between operations and personnel, yet every individual is excellent."

"I think we are very active. We are looking at what's going on in terms of current things. Sometimes we may get involved in too many novel things, but at least that's a sign that we are not stagnant....I do see a consolidation in the future in what kids are learning."

"Every attempt is made to follow the DIME Model. Development is O.K., the implementation is pretty good, yet maintenance and evaluation are not what we would like - especially the evaluation is a cause for concern with new programs coming on."

12.Our liaison person, in reviewing the report, commented: "There was an enormous effort in Arts. We have made strides (good materials, a number of people using them, individual schools where good progress is being made), but the progress is not commensurate with the effort we put in."

Table 8.5: Curriculum-Implementation Outcomes

I. Superintendents (N=6)

A. General

- Moving the whole system is tough.

B. Positive

- There has been enormous effort from K to 8.
- It is a very effective way of curriculum implementation.
- It is one of the most powerful in-service sessions I've seen.

C. Concerns

- We don't have the structure to do it all at the secondary level.
- Secondary school is "virgin territory".
- A notable failure is the arts.
- DIME on paper always looks better.
- You can only handle so many thrusts at a time.

II. Co-ordinators-Consultants (N=9)

A. General

- Curriculum development has been done, but professional development has just begun.
- Teachers' feelings about central office vary.

B. Positive

- I think that generally we do a pretty good job.
- We are very active.
- Development is "okay" and implementation is pretty good.
- I see some tremendous results.
- At the Primary level, I'm amazed at how well curriculum has been implemented.

C. Concerns

- We've been nine years trying to integrate the arts. No one was ready for it.
- There is a tremendous gap between general and advanced levels.
- We need more evaluation in the future.
- Maintenance and evaluation are not what we would like.
- Introduction of new curriculum is not done well.
- In some schools, I'm not pleased.
- Over a period of five years, half the teachers have gone, and new ones have no idea what to do...principals transfer...there goes the program.

> "Principals do fairly well in operations, that is general supervision is done very well, but the curriculum, introducing new curriculum, is not done well. Yet I am seeing some tremendous results in the form of activities, interest, and future groups, but these are specialized."
>
> "I'm not familiar with the DIME Model."
>
> "In our Primary department, I'm really amazed at how well curriculum has been implemented - when people are giving input they want to make these changes. It's much more effective than when it comes top down."
>
> "I think that generally we do a pretty good job - principals and teachers know there is a support system to help them."
>
> "I don't see much action except where the consultant had been - that is my frustration. They are frightened by it - it is risk-taking."
>
> "We have a wealth of data from standardized reading tests sitting in boxes and not analysed yet. Without any testing, it is totally obvious that the amount of reading and writing children are doing is radically different. The results are phenomenal."

It is clear from the remarks above that views of outcomes vary considerably. This same diversity can be noted in questionnaire results. When asked if the model was being implemented in relation to a particular curriculum change they had in mind, support staff replied as follows: "completely" - five, "for the most part" - three, "partially" - one, "not really" - three, and three indicated that they believed there was no particular process. The views above are consistent with the fact that support staff in South Separate reported that the purposes and goals of the system's approach were less clear than goals of the approaches in the other three cases, as perceived by their respective staffs. All but one respondent, on the other hand, saw the experience with curriculum implementation as having resulted in the professional growth of teachers. Ten believed that it had a positive impact on teacher-teacher interaction, while six did not agree. Similarly, support staff was evenly divided on whether it had had a positive effect on teacher-principal interaction. Ten considered the outcomes on communication between school-level and central-office personnel to be positive, and five disagreed with that view. A similar division of opinion was recorded regarding the general effects of the DIME approach on particular curriculum areas and the system as a whole: about half saw the approach as "moderately effective" and half as "mildly effective".

In general, the findings indicate that the model is viewed as sensible and useful, but only at a somewhat broad level. It is not yet developed at a specific level or applied on a system-wide basis. Success at the primary level is outweighed by frustration with problems in some areas, such as the arts, and with difficulties in implementing the model in the higher grades. Divided views about outcomes and lack of formal evaluation cast in doubt whether or not there will be renewed energy to develop the approach further, given that the model has already been in existence for a number of years.

We now turn in chapter 9 to the task of integrating the findings from the cases in the perspective of recent research and practice.

PART III

PLANNED CHANGE IN PERSPECTIVE

CHAPTER 9 PLANNED CHANGE IN PERSPECTIVE

We first go outside the study to consider the question of the research literature on the role of school systems in change.

Second, we present some information and make some observations about current trends and practice in Ontario relative to school-system planning and implementation procedures. We conclude the chapter by identifying "lessons for implementation" from our study, in the first instance by drawing on the case study respondents' own views, and in the second instance by formulating what we see as the main thematic findings that provide directions for future developments in planned change at the school-system and school levels.

Before turning to the research, we should note the limitations of the present study. The boards selected are not typical of all boards in Ontario, although we believe they are representative of the trend toward systematic planning for managing curriculum change. The models in their detail are especially not applicable to very small boards, although again we think that the basic principles of change apply and will be directly useful in designing models appropriate for small boards.

Third, we can only go so far in generalizing even with the boards in question, because they have not yet completed their models. They are still working on the first complete versions.

Finally, there are certain roles that we did not study. Parents and community, for example, were not examined directly, even though their role does appear in the cases. Similarly, we did not analyse the role of external agencies, such as the Ministry of Education. That too comes up in the cases from time to time, but it would require a focused analysis in its own right to do it justice.

Despite these limitations, we believe that this study breaks new ground in identifying and bringing together in a coherent form a practical theory of board-level management of change.

I THE RESEARCH LITERATURE

Despite the great strides that have been made over the past years in the study of the implementation of educational change, research on the role of school districts in change is basically undeveloped. In this section, we will review some of the few studies that have been carried out and in so doing identify the main results and gaps. We classify the studies into two types. The first type, which might be labelled "advice for policy and practice", is based either on projecting implications from what is known about school-level implementation or on the experiences of the author in question. These publications provide a number of insights but they are not based on careful empirical study at the district level. The second type, "findings from the study of innovations", is empirically based and does identify certain factors at the district level, but only in reference to the implementation of specific innovations. These latter studies do not examine the district as district, although they too provide insights about the district's role in change.

Three examples of articles focusing on policy and practice, which we will briefly summarize, are Fullan (1985), Purkey and Smith (1985), and Cuban (1984). Fullan (1985) reviews a number of cases of successful implementation at the school level, many of which referred to the role of the district, and formulates 10 guidelines for the district with respect to innovative projects: (1) develop a plan, (2) invest in local facilitators, (3) allocate resources, (4) select schools and decide on scope, (5) concentrate on developing the principal's leadership role, (6) focus on instruction and link it to organization conditions, (7) stress ongoing staff development and assistance, (8) ensure information gathering and use, (9) plan for continuation and spread, and (10) review capacity for future change.

Similarly, Purkey and Smith (1985) analyse the problem and make four general policy recommendations, and four recommendations on the role of the school board and district superintendent. The general observations are: (1) the school is the focus of change; its culture, the ultimate policy target, (2) staff members should analyse their schools' conditions, using the 13 effective schools characteristics as a guide, and concentrate on those most likely to produce an effective school culture in their situation (13 characteristics are listed in the article), (3) resources, especially time and technical assistance, must be provided to encourage and nurture the process of collaboration and participation necessary to change both people and structures in schools, and (4) an inverted-pyramid approach to changing schools be adopted to maximize local responsibility for school improvement, while it recognizes the legal responsibility of the higher government levels (Purkey and Smith 1985, pp. 362-4). The four school district recommendations are:

> "First, they would determine guidelines that facilitated the process of school improvement....
>
> "Second, the board and superintendent would specify goals for the district's schools after getting input from school staffs, the teachers' union, parent and community groups, and so on....
>
> "Third, the board and superintendent would hold central office administrators and school staffs accountable for designing and implementing a school improvement plan....
>
> "Fourth, and finally, the board and superintendent would prescribe a timeline for the project." (Purkey and Smith 1985, p. 375)

Cuban (1984) also reviews the role of the superintendent and district in bringing about beneficial change. He corroborates our claim that the role of the district has been neglected:

> Little attention is directed to the role of district leadership. Concentration upon the local school site and the principal's leadership dominates the research. This implicitly ignores the pivotal role that school boards and superintendents play in mobilizing limited resources, giving legitimacy to a reform effort and the crucial interplay between central office and school site that can spell the difference between implementation success and failure. (Cuban 1984, p. 132)

Cuban also observes that, despite the proliferation of more explicit district policies and procedures to bring about improvements, "the fact remains that no studies have yet shown which policies, independently or in combination, produce the desired effects." (p. 134)

Cuban proceeds to suggest that as no school can become truly effective without the visible and active involvement of a principal, "it also seems likely that no school board approving policies aimed at system-wide improvement can hope to achieve that condition without a superintendent who sustains a higher-than-usual involvement in the district's instructional program" (p. 146). He makes a number of what he calls "untested propositions", such as "the school chief uses a number of managerial tools to implement the mission: targetting limited resources on activities that promise to pay off; placing like-minded, skilled staff in key positions that will advance the district's mission; and actively participating in monitoring and assessing the instructional program." (p. 147) Finally, Cuban raises the issue of top-down reform and centralization/decentralization by suggesting that some degree of direction and top-down implementation is necessary for launching a program, but once launched it can "travel many routes" ranging from grass-roots development techniques to tightly managed tasks and procedures. (Cuban 1984, p. 147)

By way of summary, as useful as the above recommendations might be, note that they are not based on systematic empirical data, and they do not focus on the district office as an organizational entity. Rather they identify tasks (which are largely unassigned) or speak of the single role of the chief superintendent, ignoring the rest of the central-office roles and the organizational and procedural patterns.

Turning to the empirical studies, there have been a few carefully conducted studies of aspects of the school district's role in school improvement. Two of the better research studies are the large-scale DESSI project (a study of Dissemination Efforts Supporting School Improvement) as represented in Huberman and Miles (1984) and Cox (1983), and the work by Gersten _et al_. (1986).

Huberman and Miles (1984) provide a detailed cross-case analysis of 12 school-district case studies in which they examined the development/adoption and implementation of specific innovations. They found first that in nearly all cases the innovations were initiated by district personnel, not by school personnel. Once initiated, the successful cases were characterized by strong administrative commitment and support at the district level, and ongoing technical assistance and commitment from external and local facilitators. In brief, district administrators were required for their commitment, authority, pressure, and resource-allocation roles, and district consultants were required for their continuous technical assistance.

The Cox (1983) paper is based on the larger quantitative part of the DESSI study which examined the adoption or development and implementation of 61 innovative practices in 146 schools in 10 states. In the study, 96 external (to the district) facilitators were interviewed and 78 local (within-district) facilitators were interviewed. The study was detailed in identifying a number of specific facilitator activities which were factor-analysed to produce nine clusters of activity: (1) initiation/awareness, (2) administrator adoption preparation, (3) support of teachers, (4) teacher adoption preparation, (5) materials, (6) implementation assistance, (7) evaluation, (8) continuation/diffusion, and (9) allocating financial resources. Among the findings were: (1) the external and local facilitators performed many of the same assistance tasks, but the local facilitators spent more time on nearly every aspect of the effort at change than did external facilitators, (2) for externally developed innovations the implementation-outcome scores (e.g., change in teacher practice) were much higher for sites having both external and local assistance than for sites having only external facilitators, and (3) for locally developed innovations, sites with local facilitators had high implementation-outcome scores, as did sites with both local and external facilitators. Cox concludes that the presence and involvement of local facilitators in the nine clusters of activities is critical to successful implementation.

Gersten et al. (1986) conducted a detailed case study of the implementation of a highly structured innovation in seven schools within one district. The approach involved the intensive training of local resource teachers by external consultants. Both the external consultants and resource teachers served as "change agents and quality-control agents" (Gersten et al. 1986, p. 259). As others have noted, the researchers found that the early periods of implementation were characterized by great frustration and criticism on the part of teachers. Eventually, teachers become strong supporters of the program. The direct reason for the change was the dramatic improvements in pupil performance observed by the teachers. The indirect reasons were intensive, high-quality, specific assistance and monitoring on the part of the external and local consultants (who were ultimately perceived in a positive light by teachers) and visible support by the central administration (Gersten et al. 1986, pp. 270-1).

Other studies have confirmed the importance, activities, and skills of district-level personnel and other local facilitators in accomplishing improvements (Corbett _et al_. 1984; Miles _et al_. forthcoming; Odden _et al_. 1986). All of these studies point in the same direction. They document and describe the critical role of ongoing assistance, support, and pressure from district consultants and/or district administrators. They make a very substantial contribution to the study and practice of change. They are most developed in the specification of district-consultant activities, but not in what district administrators do, and not in how the district organizes itself to manage change. They are limited to tracing the fate of particular innovations in relation to selected district factors. They are, so to speak, studies of single innovations, not investigations of how districts are organized to manage multiple innovations.

Hall _et al_. (1985) provide one of the few papers that points out how little we know about the role of district personnel in change. They also provide some tentative observations and raise a number of unanswered questions, based on the retrospective analysis of data they had collected in 11 school districts. They first review the literature and confirm that there is a very limited amount of research available about the roles of district personnel. Some of their observations derived from analysing the interviews in the 11 districts, include:

- A wide range of titles is used for district office positions.
- Personnel in the district office often seem to have relatively little clarity about the scope and primary purposes of their roles.

- There is tremendous variation in how much time district-office personnel spend in schools.
- There is a dramatic difference in the amount of real authority and power individual district-office personnel have that is related to whether they are in line or staff positions.
- There is little congruence between what district-office personnel in staff positions say they do and what others perceive that they do.
- Teachers view district-office people in line positions as remote from their classrooms.
- Teachers have very little understanding of what persons in the district really do.
- District-office personnel are providing the impetus, as well as being the source of many innovations that are implemented in schools.
- District-office personnel are consistently in a crossfire of demands and expectations.
- District-office personnel do not have specialized training for their positions.
- Describing what they do is difficult.

To conclude at the level of the present study, we know very little about the models, plans, policies, and procedures that districts develop to attempt to manage change. Even for something as concrete as implementation plans, precious little is known about the process of effective plan-making, what should go into a plan and when, and the best methods for developing the skills and commitment necessary "to implement the implementation plan". In conjunction with the need to know more about models and plans, we also need to find out much more about the roles, role relationships, and organizational structures which are most effective in bringing about district-wide and school-level improvements. Our study attempted to provide data on both the matter of models/plans and on the roles and patterns associated with implementing district approaches.

II TRENDS AND PRACTICE IN ONTARIO

Many, many boards in Ontario have recently developed, or are in the process of developing, implementation models and procedures. We should like to outline and comment on this phenomenon which for reasons that will become apparent we can label "the CRDI Syndrome". We will first provide some brief description of the origin, extent, and nature of the documents being developed. Second, we raise some important questions and caveats about the meaning and implications of these developments.

The CRDI Syndrome has been fuelled by two mutually reinforcing forces: (1) On the one hand, research on problems of implementation and corresponding strategies for addressing these problems have developed with great intensity and increased specificity over the past 10 years in the research literature in general and in the developmental work in Ontario by Leithwood and others. The Ministry of Education has sponsored the dissemination and awareness of these issues through the funding and publication of douments, such as Fullan and Park (1980), and through the development of a discussion paper outlining a Curriculum-Review Development Implementation (CRDI) procedure (Ministry of Education 1982), and the subsequent revision and elaboration of the CRDI document (1986). (2) The other force was that people in school systems had a problem. They were faced with an endless stream of curriculum guidelines that were being revised and issued on a continuous cycle, not to mention major policy reforms which occurred regularly. They were overloaded hopelessly and had no organized means for coping with the demands. It was a natural marriage. Several boards had picked up the initiative early and began developing procedures in the latter part of the 1970s. The CRDI discussion paper stimulated many other boards to develop their versions of planned-change models.

We can provide some notion of the extent of this development by reporting on two recent surveys. The Ministry of Education (1985) conducted a provincial survey to gather information on the extent and nature of school board plans for program implementation and evaluation. They found that 43 per cent of the 124 boards in the survey had written plans. The plans themselves were requested from a small number of boards and analysed using 11 criteria. The study found that 60 per cent of the plans were part of board policy, 88 per cent contained role descriptions, 73 per cent specified timelines, 80 per cent included statements about professional development, and so on. The least-frequent inclusion was reference to budget provision which occurred in only 50 per cent of the written plans.

On-site interviews were carried out in a subsample of 18 boards to investigate the degree of congruence between plans and practice, and to assess the strengths and weaknesses of the plans. With respect to the former, the study found wide variation in the degree of correspondence. Only 44 per cent of the sites were classified as having high correspondence in practice to the written plan, with 39 per cent at medium or low, and 17 per cent at the stage of "plan too new to comment". Some of the strengths of having a written plan were seen as: focuses attention, provides co-ordination, clarifies role definition, makes follow-up more likely. Perceived weaknesses were: not covering all the necessary elements, too theoretical, the inclusion of components unlikely to be provided (e.g., resource personnel, released time), and an inadequate evaluation component.

A more detailed study was carried out in 1985-86 in the Western Ontario Region by Butt (1986). He studied all 21 boards in the Western Region, interviewing superintendents (N=23), consultants (N=49), principals (N=59), and teachers (N=72), several of whom were professional-development representatives of the various teacher federations. On the question of the existence of implementation plans, he found that only 24 per cent of the boards had written plans (below, by almost one-half, the Ministry's provincial survey which found a 43 per cent average and 48 per cent in the Western Region based on the identical sample of the 21 boards). Butt asked, "Does your board/system employ effective evaluative and follow-up procedures?" In response, 19 per cent said yes, 81 per cent, no. When asked if this board would use material developed by an outside group, 97 per cent said yes. Some commented along the lines of "let's eliminate privatism." Butt also asked, "Would this board contribute to a material pool?" on implementation plans. In noting that 89 per cent said yes, Butt observes: "interesting response, since only 24 per cent of the boards have a plan."

(Butt 1986, p. 11) Further, all 21 boards responded that they would release staff to help other boards. The author analyses a number of other aspects including the identification of curriculum activities that are perceived as most effective, a brief description of three innovative pilot cases, and concludes with 31 recommendations (Butt 1986). Both the provincial and western surveys note that there is greater reluctance and/or difficulty in engaging secondary schools in planned-change activities.

Before drawing some conclusions we will provide a general idea of the typical components of recent board plans and procedures. We start with the CRDI model. The Ministry of Education's (1982) discussion paper outlines a three-phase model - review, development, and implementation - noting that it is a continuous cyclic process, with considerable overlap among the phases. The paper identifies five changes implied by the new approach: (1) the need to establish regional curriculum project management teams for each project, (2) the use of program reviews, (3) the analysis of curriculum development proposals, (4) new implementation procedures incorporating staff development, and (5) the need for communication about the procedure across the province. The paper concludes with an invitation to act.

Four years later, based on reactions and further developments, the Ministry of Education (1986) produced a revised and elaborated draft discussion document on CRDI as a "Guide for School Boards". The document suggests: "it is desirable for each school board in Ontario to have in place a well-developed, system-wide Curriculum Review, Development, and Implementation process." (p. 1) An eight-page CRDI Management Matrix is outlined, identifying the main tasks, activities, and role responsibilities at an overall level - Managing the Process - and at each of the three phases - Review, Development, and Implementation. For each of these four components suggestions are made as to how local school boards might go about developing the particular phase.

In the meantime, and partly as a result of the 1982 discussion paper and its implied expectations, boards have been developing and approving their own CRDI-type manuals. The Ministry's discussion paper has heightened awareness about implementation planning and has stimulated the development of board-level planning documents. Most of these plans have appeared in the 1984-86 period, many in the last 12 months. The titles and outline of contents of five of these plans which we have selected from our files can be used as illustrative. Example One is called "Guideline Implementation Manual" and identifies five phases (needs-assessment, development, implementation, evaluation, and maintenance). All major tasks and roles are defined in a 29-page manual with accompanying appendixes.

Example Two, "Curriculum Review, Development, and Implementation Plan", outlines three phases: review (1 year), development (1.3 years), implementation (1.5 years), with roles and procedures specified.

Example Three, "Curriculum Review, Development, and Implementation Policy and Procedures", is a manual which defines the phases, calls for the development of a system-wide plan, and specifies the components of the plan.

Example Four is a white paper, "Policies and Procedures for Curriculum Management", which outlines the familiar phases and tasks.

Example Five, "Procedures Manual for Curriculum Review, Design, and Implementation", describes the organizational mechanisms (development, implementation, and review committees/teams), in relation to seven major tasks: goals, desired states, stages of growth, current states, obstacles, strategies, and monitored progress.

The local procedural/policy documents just described are usually in the 30-page range and most refer specifically to the research on implementation as part of the rationale. One can expect the Ministry of Education to continue to disseminate and revise its CRDI manual, to stimulate a variety of network exchanges within regions, and generally to set the expectation that every board should develop its own CRDI model. In addition, the nine OISE field centres collectively are developing currently their own CRDI handbook for working with school boards.

We are now in a position to draw some tentative observations about these developments, on both quantitative and qualitative grounds. Quantitatively, we could estimate that some 40 per cent of the boards have developed CRDI-type policies/plans. The provincial survey found 43 per cent; Butt (1986) using more probing questions found 24 per cent in one region where the

Ministry had found 48 per cent; even more have been developed since Butt's data-gathering in the fall of 1985. So, 40 per cent is a reasonable estimate, and that percentage is climbing and will continue to do so for the next few years.

The qualitative questions are more interesting and more revealing: Is having a plan better than not having one? What should a plan contain? What is the best way for developing a plan? There is not much evidence to support the assumption that having a formal plan is more effective than not, although we are prepared to suggest that developing some plan that addresses implementation problems more explicitly is probably a good idea. The more important issue in our view is the quality of implementation of the plans. Recall that the provincial survey (Ministry of Education 1985) found that only 44 per cent of the boards who had plans could be considered as actually following the plans in practice. Even this does not refer to quality of implementation, only to appearances of following the plan. Note, the implication is that up to 40 per cent have plans and less than half follow them. On balance, then, using a generous interpretation, less than 20 per cent of all boards have plans that they follow, to say nothing of the effectiveness of the plans in action.

To conclude, in our assessment the question relates to the quality of the plans and to the quality of their implementation. In their in-depth study of effective performance-appraisal systems, Wise and his colleagues make the point best:

> We found that the form and procedures of the relatively few successful teacher-evaluation systems vary little from those of the less successful systems. The successful ones are, however, distinguished by their seriousness of purpose and intensity of implementation. (Wise *et al*. 1985, p. 104, our emphasis)

Put another way, CRDI-type models and procedures are innovations in their own right. As with other innovations, commitment, quality, and skills of those implementing CRDI are critical. Whatever we know about how to (and how not to) plan and implement innovations applies to how to go about planning and implementing CRDI models. The caveat then, is that we must approach the development of local models for change as matters of "seriousness of purpose and intensity of implementation" and of the development of skills and co-ordination in actually using the model. As with all educational innovations, what is on paper is less important than what is happening in practice.

III LESSONS FOR IMPLEMENTATION

We discuss the implications for implementation in two ways. First, we provide an indication of what respondents in each of the four cases thought the lessons for implementation were. Second, we will then formulate what we see as the major thematic findings in the study as a whole, in order to provide directions for future developments in planned change at the school-system and school levels.

Respondents' Views

We asked the question "As a result of your experience over the last couple of years or so, what have you learned to do, and learned not to do in introducing and implementing change more successfully?" We first report some illustrative direct quotes from East County so that a flavour of the actual comments might be obtained. Following this, we provide in summary form the main lessons identified by respondents in the four cases.

Typical comments in East County were:

> "I have learned first to involve strong teachers. I have become committed to a model of planned change that requires and gets the commitment of superintendents. Area superintendents are now directly involved in implementation."
>
> "If I have learned anything it is to be slower off the mark so that we have good information to share with people. For example, the collection of information around current status by asking teachers who are teaching the courses. Rather than launching into implementation, we get data and realize that we have to address it collectively rather than as individuals."
>
> "We start with the level where people are at. We negotiate with them what they are doing and why. For example, we ask a principal how a particular presentation will fit into an overall plan. Another point, we always work through authority."

In the other three cases similar points were mentioned, but much more in terms of what would be needed in the future. Receiving a large number of mentions across the four cases were the following:

- Set manageable expectations - change takes time - but be persistent; focus pressure on a few projects.
- Build in-school leadership capabilities by developing principals, involving other lead teachers and consultants.
- Place more emphasis on implementation by avoiding one-shot workshops, preparing for implementation and concentrating on ongoing in-service training.
- Give latitude for adaptation in schools by accepting variation but maintaining follow-through.

- Don't mandate change without providing support (money, material resources, personnel, professional development).
- Work on people's understanding of the purpose, expectations, and the processes of change.
- Help teachers fit the innovation into what they already do by clarifying similarities as well as discrepancies.
- Teachers need concrete curriculum documents.
- Give teachers the chance to work through a change by encouraging risk-taking and sharing.
- Build in involvement and support of line administrators.
- Gather data on extent of implementation and problems encountered, only if there is a procedure for using the data to bring about improvements.
- Provide incentives, good documents, opportunity for sharing, in-service training, recognition for good work.

In summary, people have experienced unmanageable expectations, unclear procedures, lack of specificity of how a proposed change relates to what they are now doing, uneven involvement of line administrators in planning, supporting, and monitoring change, and an inadequate sense of progress (how they and others are doing). The lessons that people have learned include: to start more deliberately and selectively with an assessment of the situation; to start on a small scale in any number of different ways and to negotiate and insist on plans with those affected by them; to involve those in authority roles with implementation procedures and support; to link development, support, evaluation, and implementation; and to combine incentives and rewards with accountability.

IV THEMATIC CONCLUSIONS

We have attempted to identify the major thematic findings in the study which are based in and across the cases, and which provide guidelines and directions for further work on developing effective local support structures and practices for bringing about educational improvements on a continuous basis. In so doing we will note some of the dilemmas and limitations in our knowledge.

We should like to emphasize and comment on the following 10 overlapping and mutually reinforcing themes:

1. From Innovations to Systems
2. The Unknown Role of the Secondary School
3. The Integration of Curriculum and Professional Development
4. The Integration of Authority and Support
5. School-Level and District-Level Co-Development
6. Teacher Involvement and Incentives
7. New Roles for Consultants
8. Criteria for Promotion to Positions of Authority
9. Longitudinal Development of the Elements of Planned Change
10. Capacity Building: Skill in Doing

1. From Innovations to Systems

The most important and overriding theme is that our study directs the focus of concern away from the implementation of specific innovations towards organizational or system approaches to program improvements as an ongoing component of school system operations. This represents a fundamental shift away from the preoccupation with specific innovations towards a preoccupation with system procedures as the major means for implementing any number of particular innovations. This is, it should be stressed, a paradigm shift in the study and practice of educational change. School boards are in the business of managing multiple potential changes simultaneously. Research has been limited because it has been governed by a focus on the implementation of specific projects. The new perspective requires an answer to the question "How does a school board manage multiple changes?" Most of the remaining nine themes provide directions for answering this question.

2. The Unknown Role of the Secondary School

In recalling the case studies, it should be noted that virtually all of the experiences in using the four models have been with the elementary panel. We cannot generalize from our study to secondary schools. It is only very recently, within the past 12 months it seems, that the first tentative moves have been made with secondary schools. We have no doubt that many of the same principles of change will apply, but also there will be differences. The management of change in large secondary schools is a much more complex affair involving the development of a larger leadership team consisting of principals, vice-principals, and department heads, few of whom have had experience let alone training in the direct planning and implementation of curriculum change (see Lacey, Pinkney, and Wensley 1986; and Fullan and Newton 1986 for a recent example of attempting major curriculum change at the high-school level).

Special attention should be paid immediately, and for the foreseeable future, to what might be the best approaches for school boards in stimulating, supporting, and responding to the management of change in secondary schools. OSIS (Ontario Schools: Intermediate and Senior), as has been seen in the cases, already has put curriculum change in the high school under the spotlight. The early response from administrators and teachers in secondary schools has combined both a sense of overload and a potential interest in curriculum change. We predict that secondary school teachers and administrators, hitherto dormant in the curriculum-change arena, will become leaders of curriculum-improvement efforts over the next five years, if the developments contained in the other nine themes continue to move in their current direction. At this point, however, it is not clear that the particular models in use in the four cases are the most appropriate ones for working with secondary schools.

3. Integration of Curriculum and Professional Development

The days of the one-shot workshop at the local level are numbered. Several consultants said, "I will never do a one-shot workshop again." By that, they mean that whatever workshops they do, follow-through must be built in; that is, they must form part of a plan. Consultants were too pressed for time to waste it. Put in more thematic language, professional development must become more curriculum- and job-embedded. It works both ways: (a) when contemplating a curriculum priority, build in some ongoing professional development; (b) when contemplating a professional development event, link it to curriculum priorities and follow-through. Further, it is not just a matter of setting up mechanisms to ensure that central-office personnel are developing integrated plans. It also requires procedures that effectively call for, and channel, the professional requests of school personnel into support for curriculum implementation. All four cases were attempting to do this. In East County it was basic to all stages of the model; in Region North it was historically not part of the model, but was being integrated in the new proposal. In West County a series of professional-development workshops formed part of the model at the system level, but integrated professional development was not yet fully grounded at the school level. In South Separate the ongoing role of professional development was more varied. In any case, the two key characteristics are ongoingness and being curriculum-related. Coaching is one recent, popular, and effective example incorporating these characteristics (Showers 1985, 1986).

This is not to say that large-scale annual conferences, university courses, and the like are useless. They serve different purposes: awareness of new ideas, a chance to meet peers, individual learnings, a time to get away from the daily grind. These are valuable and necessary. However, when it comes to local-level curriculum priorities, professional development defined as the sum total of formal (e.g., workshop) and informal (e.g., peer interaction) learnings experienced by teachers and others, must be incorporated as part and parcel of an implementation plan.

4. The Integration of Authority and Support

Traditionally, in school systems there has been a tendency to keep authority and support separate on the grounds that the evaluative role of authority is incompatible with providing developmental support. Our case studies indicate not only that these two functions can be compatible, but that it is essential that they be closely integrated. In particular, putting the responsibility for implementation planning explicitly and squarely on the shoulders of those in line positions - principals and area superintendents - makes it necessary for support and authority to be combined in a way that greatly strengthens the likelihood that sustained attention will be paid to implementation and follow-through. This represents a change, as well, in the role of consultants. The change can be reinforced in either, or ideally in both directions (principal-consultant and vice versa). The consultant who said, "Another point, we always work through authority" reflects this orientation, as does the principal who involves consultants in helping to formulate implementation plans.

Note that this theme represents much more than the vague, general expectation that line administrators are "somehow" responsible for implementation. It means the involvement of area superintendents and principals much earlier in determining particular priorities and formulating associated-implementation plans. It means the use of commonly understood and skilfully applied implementation practices on the part of line administrators working with principals and teachers, and incorporating available support services to address agreed upon curricular goals of the school and area/system. It also signifies that teachers and administrators are actually held accountable for implementation. This can be accomplished by making the quality and effectiveness of implementation planning a component of personnel supervision, along with encouragement and tolerance of risk-taking, especially in the early stages, and follow-up support in overcoming obstacles. All of this in the context of a clear mandate to implement. Schools and areas in the four case studies were only part way along this road, but they were clearly heading in this direction.

Some structural reorganization should also be considered by school boards in reference to this theme. At a minimum, it means making explicit the implementation-planning role expectations of operations superintendents. Beyond this, boards should examine to what extent their present structures facilitate or inhibit the co-ordination and integration of curriculum development, professional development, curriculum support (i.e., consultants), curriculum implementation, and evaluation.

5. School-Level and District-Level Co-Development

Researchers and practitioners alike have thought of school-based curriculum decision making and central-office curriculum decision making as if they were mutually exclusive. Grass roots versus top down, decentralization versus centralization, or whatever distinction one selects are false dichotomies in our case studies. Development at one level in the absence of development at the other level is ineffective for accomplishing improvement. Neither grass-roots nor top-down approaches work by themselves. Central co-ordination, pressure, and development is essential, but so is corresponding school-based development on the part of principals and teachers as implementation decision makers. The solution is neither more nor less centralization, but rather it lies in the area of increased interaction and negotiation between schools and area or central offices, and investment in the development of capacities at both levels. The process is probably more powerful if it is initiated from the centre because the centre has more scope, resources, and, consequently, potentially more influence. Once started, equal attention must be given to development at both levels and to their co-ordination. Let us push further into this complex and paradoxical area.

It is often said that the school is the unit of change. But what exactly does this mean? It does not mean that the school works in isolation. It does mean that, however the process is initiated, the school is the unit that must work its way through the implementation if it is to succeed. Intense school-level involvement is necessary during implementation, but the initial stimulus may very well come from outside the school (Crandall _et al_. 1983 found that it nearly always came from the district rather than the school).

The district is also essential for supporting, insisting on, providing resources, ideas, and guides for, and monitoring, school-level plan making. The district can also play an important role in ensuring the quality of innovations by organizing and co-ordinating field testing and program evaluations. There are at least two levels of plan making - district and school. Districts may not impose specific curricular priorities, but they can require, help, and hold schools accountable for school-level implementation planning (see East County, and Purkey and Smith 1985). Districts can also make an enormous difference by developing and using curricular-change criteria in selecting people for positions of authority in the system (see theme 8). Further, even when individual schools are dynamic, high-powered, professional entities, they are, when one looks closely, fragile unless district-level leadership cherishes and supports them (see Little 1985). Highly valued individual schools are not durable in the absence of district appreciation and cultivation.

The third clarification is occasioned by some recent research that claims the principal is not always essential for curriculum improvement (see Cox and Loucks-Horsley 1986; Gersten et al. 1986; Hall and Hord 1986). These studies make an important contribution in identifying other critical change facilitators at the school and local level, in revealing the pattern and importance of teams of leaders, and in demonstrating that some improvements can be accomplished without the active involvement of the principal.

We think that these studies are technically correct, but conceptually misguided. It is true that a specific curriculum can be implemented without the involvement of the principal (although it is easier by far if the principal is actively supportive). But we are not talking about implementing any given curriculum. What is at stake is how to manage multiple innovations, how to make school-level implementation planning become second nature, how to change the very professional culture of the school toward collegiality, collaborative work, experimentation, assessment, and continuous improvement. The change is fundamental because it represents a change in the school as an organization. Far from getting the principal 'off the hotseat', it places her or him squarely on it. Change in organizations must be led by the head of the organization - the principal.

To conclude, we return to the issue of school-level and district-level co-development. While we have observed empirically that the initiative is more likely to come from the district, we have no doubt that once school-level development occurs, as it must if improvements are to be made, the school gradually takes on more initiative in not only identifying needed implementation resources, but also in selecting priorities. While the district may set up ways to enable and ensure that schools are focusing on implementation, we should not be mistaken about what is happening. It is a process of empowering the school and community and of committing district resources to follow through on implementation requests arising from school-level planning.

6. Teacher Involvement and Incentives

Teacher participation and incentives for becoming involved in efforts at change is a perennial problem. Systems have tried high involvement (e.g., teachers responsible for curriculum development) and low involvement (e.g., curriculum consultants developing curriculum), both to no avail. The best approach in general terms involves setting up a process which starts where people are. This was one of the main lessons learned and emphasized by the people interviewed; it is necessary to find out where teachers are in relation to proposed new changes before launching into a project. In addition, the process (a) is open from the beginning; (b) involves (i.e., mobilizes) more and more teachers at each stage so that, by the time curriculum reaches system-wide approval, there is commitment and considerable implementation already (that is, implementation should be conceived as something that starts right from the beginning when a document is first discussed, or when development commences); (c) provides co-ordinated support and pressure from principals, superintendents, and consultants; and (d) is based on a philosophy and practice of recognition through incentives and rewards to teachers at all stages of the process.

The critical question is "What is in it for teachers if they are to take a new curriculum initiative seriously?" We have seen in the process of change that the early stages of implementation involve great effort (costs) on the part of teachers and provide few tangible benefits. Furthermore, in the experience of many teachers, previous attempts at curriculum change have not been highly positive experiences, that is, the costs in time and energy have far outweighed the rewards. Indeed, many of these efforts failed to achieve any substantial results. Therefore, any approach to curriculum change with teachers must reduce some of the early costs and increase some of the early rewards. The traditional model in Region North requiring teacher involvement in curriculum development exacted high early costs for teachers on the laudable assumption that the presumed (but later) professional-development rewards would be great. Deep dissatisfaction resulted. Some of the steps which achieve an initially more favourable cost/benefit ratio are: (a) controlling the number of projects affecting teachers at any one time, (b) working with volunteers, (c) working incrementally and developmentally in developing high-quality practical curriculum materials, (d) adding more teachers as the process unfolds, (e) giving teachers the opportunity to try smaller parts or more manageable chunks before proceeding to larger ones, (f) giving teachers a sense of some early success and recognition (recall the East County person interviewed who said that "it is hard for good work to go unrecognized" in this system), (g) providing satisfying, small-group professional sharing and other interaction with teacher colleagues, and (h) obtaining a definite sense of mastering new worthwhile skills that increases the teachers' sense of professional competency and achieves favourable reaction and results with students.

Moreover, the results of participation at the development stage must be tangible and rewarding to those involved, and valued by colleagues at later stages. Time invested in developing curriculum projects and plans which do not get used by anyone else, dampens enthusiasm for future participation. Focusing on development at the expense of implementation diminishes the value of participation, because teachers see that their efforts go for nought.

Finally, the essence of school-level development, discussed in theme 5, is that it empowers the school - principal and teachers - to have greater influence in selecting priorities and especially in determining the course of action by way of school-level implementation planning. This empowerment - more control over one's professional destiny - and a sense of making a worthwhile contribution in co-operation with, and in conjunction with, the system and its goals will be the eventual solution to the teacher-incentive question. We are referring, as noted in the previous point, not to individualistic professional control, but to collective professional control in which responsibilities as well as rights are embedded in, and intrinsic to, the process. Collective professional efficacy in improving education may well be the ultimate motivator.

7. New Roles for Consultants

The role of system consultants is shifting from being technical experts in the content of curriculum (although this will still be essential for specialists) to being experts in the process and procedures of managing change. This applies both to those consultants with essentially curriculum-development responsibilities, and to those whose primary responsibility is professional development (but not necessarily curriculum writing, as in Region North). It is a matter of increasing the in-school, follow-up role of those in traditional curriculum-development roles, and of linking the support of professional-development consultants more closely to curriculum-implementation processes.

In any case, consultants will need to combine and integrate expertise in curriculum and change. The latter includes knowledge, commitment, and skill in board CRDI-type procedures, knowledge of how people learn and consequently of the most effective in-service education designs, ability to develop technical aids for the process of change (e.g., to assess implementation, to evaluate progress, to provide guidelines for developing implementation plans), and the ability to participate in, and help principals and teachers develop, school-level implementation plans. The consultants' right to refuse to do a workshop unless the principal and teachers are willing to sit down and formulate a follow-through plan is evidence of the orientation to change we have in mind. Consultants, in other words, will have close field-based working relationships with principals and teachers, and more communication with line superintendents in initial and follow-up implementation planning.

In addition, some priority should be given to co-ordination and exchange among consultants. In our questionnaire, difficulties in co-ordination among curriculum support staff who were working with the same clients on different curriculum changes, were seen as problems by one out of two consultants. Asidé from the obvious need to co-ordinate schedules to minimize unnecessary disruption at the school level, we also detected that many good ideas and techniques developed by individual consultants for dealing with implementation tasks remain as hidden, untapped resources. Just as peer exchange among teachers is essential for implementation, so is exchange among consultants, as they test and share ideas and techniques for what works best, and what to avoid.

In short, consultants need skills in both the content and process of change. The skills deemed by those interviewed to be essential for consultants reflected this dual, but blended capacity: subject-matter expertise, curriculum-development experience, general knowledge of teaching and learning, knowledge of, and ability in, the implementation process, political and human-relations skills in managing and relating to all levels in the system, credibility, initiative, ability to motivate people, etc.

Consultants, as we know, are not trained even for their curricular roles, let alone the change-related aspects they face. In the survey, we asked consultants how useful they found certain experiences in preparing them for their present positions. Of the experiences they found "very useful", 88 per cent indicated "on the job experience", 54 per cent said "attendance at conferences", 37 per cent indicated professional journals, 25 per cent said university courses. Only 13 per cent said "board-sponsored training". Consultants, then, learn their skills incidentally. It would be helpful in our view for boards, in conjunction with external agencies (faculties of education, OISE, other boards, Ministry of Education), to develop some pre- and on-the-job in-service training focusing on the new (agent of change) role of system consultants (see also Miles et al. forthcoming).

8. Criteria for Promotion to Positions of Authority

One of the most common and powerful themes across the four cases was the recognition and endorsement by everyone that "if you want to get anywhere in this system you have to have already demonstrated curriculum leadership and skills". It was most explicit in the recent East County document listing the criteria that would be used in promotion interviews for department heads, but the emphasis on curricular strengths permeated the systems in reference to appointments of vice-principals, principals, department heads, and supervisory officers. Combined with the predicted high turnover rates of administrators (in the range of 40-60 per cent in most school systems in Ontario) because of the retirement pattern over the next seven to 10 years, we can expect an enormously powerful impetus for managing and supporting curriculum improvements. Another feature of this development will be the appointment of a large number of women, as there is a greater pool of women who have begun to enter the first levels (e.g., vice-principals) and because, in our experience, women tend to be curriculum-oriented (although we do not have direct data on this matter).

In light of our knowledge about the time it takes for effective implementation, a question may arise about the common practice of transferring principals every few years. Actually, the institutionalization at the system level of effective curriculum-implementation models should lessen the negative effects of such transfers by ensuring some continuity in the process of change in the school, independent of an individual leader.

In sum, where curriculum models and procedures have been put into place, even at early stages, and where each new leadership appointment predictably adds to the critical mass of leaders who understand and are skilled in using the procedures, school boards' capacity for managing change should increase substantially in Ontario over the next decade.

9. Longitudinal Development of the Elements of Planned Change

Taking the new paradigm - establishing the capacity of school systems and schools to manage multiple changes - it is clear that this cannot be done all at once. In general, it takes persistence, reflection, and action. At a more specific level, it can be seen as a process of incrementally putting in place each of the major elements of an effective model of change: initiating central-office procedures; clarifying objectives; doing high-quality curriculum development; attending to the implementation-planning, supporting, and monitoring roles of area superintendents and principals; developing one technical aid after another; getting more effective at arranging ongoing, cumulative in-service education for teachers, principals, and others; figuring out how best to build in believable, usable program reviews and other evaluations. The order of these tasks is not the point, but the idea that you can start in any number of different ways, that you cannot do everything at once, and that it takes several years to get the major pieces in place and functioning in a co-ordinated manner is critical.

As we have said earlier, there is not that much in the literature about model making or plan making. East County had been at it for 10 years before getting most of the components of the plan developed. West Public has been working for five years and is not yet at the stage of using the full-blown model. South Separate has been using a more general, voluntary model and has not yet developed the details. Region North is an interesting case. The Board started in the mid-1970s with an innovative organization design, in which Councils produced general curriculum guides, with individual teachers/schools expected to develop their own detailed curriculum. What evolved, as we have seen, was pervasive teacher and principal dissatisfaction arising from the overload and difficulties in writing school-level curriculum. A paradoxical situation has arisen in Region North in which preoccupation with these past criticisms tends to dominate efforts to design a new approach, despite a number of improvements that have been made already over the past four years or so. In other words, not only do technical problems have to be overcome, but also the accumulated attitudinal and political problems must be lived down.

Despite the lack of good research on plan or model making, we can make several observations. First, in each of the cases a major initial problem is to find and establish an appropriate balance between development and implementation, so that sufficient attention is paid to each at both the system and school levels.

Second, in each of the cases "evaluation" was the final component to be addressed, and none have fully addressed it. It appears that evaluation or monitoring progress is the most sensitive and difficult component to establish.

Third, recall that we need to distinguish between plan making at least at two levels. At the board level it involves CRDI-type models that establish standard policies and procedures for the district. Coupled with this level of development, each school (principal and staff) must become good at school-level implementation planning, that is, formulating their own specific plans vis-à-vis particular curriculum priorities. The school may develop its own standard procedures for applying selected priorities. In our cases, school-level plan making has followed system-level planning, and at this point it is still not well-developed. Thus, there are at least two different types of planning requirements.

Fourth is the question of how long it takes for a system to become proficient at managing change. East County took 10 years, but during a period when the knowledge and guidelines were not nearly as precise as those that exist in 1986. There will always be a certain amount of continuous learning, but we expect that, with present-day knowledge and opportunities for new administrative appointments, a system could become reasonably proficient within five years (it clearly varies with size of the system and other local conditions). In some sense it is never completed, because refinements will always be necessary, as will procedures for orienting and incorporating new staff and administrators, although the latter procedures would be built into the model.

We reiterate that the main reason change takes several years is not the absence of technical knowledge, but essentially because, for a system "to get good at change", it must go through the process of intense and high-quality implementation of the model. It is not the model on paper that counts, but the degree to which staff at all levels master the skills, co-ordination, and internalization (full understanding and commitment) required. This takes time and care, by definition, no matter how wise the approach.

10. Capacity Building: Skill in Doing

People get better at planned change by doing it, by starting somewhere, and building on it deliberately as they discover aspects that need work. Being a critical consumer of the research on planned change, is also an important resource for developing, checking, modifying, and being reassured of the soundness of the approach that is being used. We found evidence in all four cases that the models being developed attempted to combine research knowledge about effective approaches to change with practical knowledge gained from experiences in applying the models.

As we stated above, the precise order of the tasks is not as important as realizing that one cannot do everything at once. "Start small, think big," as one of the leading researchers in change advises (Miles 1986). Our own previous recommendation is similar:

> The question of where to start is crucial, but the answer is by no means clear...the effective superintendent looks for a number of leverage points, depending on the conditions, and employs several simultaneously - working with principals, professional development of teachers, figuring out ways of maximizing interaction, creating commitment - in short, establishing a number of footholds, promoting them incrementally in mutually reinforcing ways in an attempt to generate school improvement. The advice is to start small and expand as one gets better at the change process through experience in a particular setting." (Fullan 1985, p. 418)

The preceding nine themes are interactive and mutually reinforcing. As a set, they amount to capacity building. Once one has a number of key elements in place one can begin to reach a critical mass in which actions feed on each other and become more efficient and more effective and the system in a sense comes to have its own generative power. Capacity building is a process whereby reflective practitioners in a system collectively accumulate and organize wisdom about the do's and don'ts of implementation. If done deliberately, with each particular cycle, people get a little better at it, having learned that some things work and that others don't. After several cycles one's theory of change and associated skills and judgement starts to become internalized. Implementation, in a word, becomes easier.

While implementation in the future should become less onerous and more gratifying, following the themes identified in this study, we should not underestimate the inherent complexities, dilemmas, and unpredictability in the business of change. Change must contend with individual personalities, situational conflict, lofty goals, and insufficient resources. We are in the business of making progress in the face of perennial problems. The progress has been definite and promises to be even moreso over the next decade. As with most complex endeavours, the hardest thing is to get started. The second most difficult thing is to be persistent. The management of educational change is reaching a new level of sophistication. We are on the verge of a breakthrough. Now is the time to capitalize on the convergence of our knowledge and the opportunities before us.

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